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The unsatisfactory state of education for the deaf is a result of the lack of programs assaulting problems of communication and of language learning of the deaf, lack of well planned and adequately supported research, and the failure to develop systematic and adequate programs for educating the deaf at all levels. Early detection and early attention to the problems of language and speech preparation are necessary. The changing occupational outlook requires the deaf to attain new heights in educational achievement.

Federal funds should be authorized for regional and interstate planning; demonstration programs lasting 5-10 years and including new and more widespread courses of study should be established in existing schools for the deaf, in future schools for the deaf, and in classes for the adult deaf. Additional support should be given to Gallaudet College to improve its academic status, the type and number of courses, the quality and quantity of teachers and students. A continuing national advisory committee should be set up to gather information, to assess progress, to identify problems, to suggest innovations, and to direct research efforts.

The appendix includes a special study on the objectives of an educational program for the deaf, historical background, and a study of European programs for the deaf.

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EDUCATION OF THE DEAF

A Report to the
Secretary of Health, Education, and Welfare
by his
Advisory Committee on the
Education of the Deaf

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This report was prepared by an Advisory Committee on the Education of the Deaf appointed in March 1964 by the Secretary of Health, Education, and Welfare. The members of the Committee, none of whom was affiliated with the Federal Government, were encouraged to exercise their own initiative and to express freely their professional judgment in the conduct of the study and the preparation of the report. The points of view and opinions expressed do not, therefore, necessarily represent the official position or policy of the U.S. Department of Health, Education, and Welfare.

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Printing of the Advisory Committee report was authorized by the Department in March 1965 in order to make the material available to the many government agencies, schools, voluntary organizations, and individuals interested in the education of the deaf.

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EDUCATION OF THE DEAF

A Report to the
Secretary of Health, Education, and Welfare
by his
Advisory Committee on the
Education of the Deaf

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Office of the Secretary
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1965

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February 11, 1965

The Honorable Anthony J. Celebrezze
Secretary of Health, Education, and Welfare
Washington 25, D. C.

Dear Mr. Secretary:

In March, 1964, you appointed the undersigned as an Advisory Committee on the Education of the Deaf and instructed us to conduct a study of the problems of education of the deaf and of the programs in the nation which are directed to meeting them. Your detailed instruction to us is set forth in Appendix A of our report.

The Committee feels that it has pursued its objectives with an appropriate sense of urgency and with due regard to the complexity of its charge. The full Committee itself has met 8 times for a total of 16 days. It has been briefed by key Federal officials, including Gallaudet authorities. It has gathered extensive information through questionnaires and from field visits of the Committee staff, and it has solicited and received the views of a wide range of persons and organizations concerned with the education of the deaf. Intensive staff studies were done of Gallaudet College and these were augmented by the views of expert consultants. The Committee's explorations may fairly be said to have been nationwide (and, indeed, even international in the light of Appendix C). As some of the Committee's recommendations make clear, its studies are not presumed to be exhaustive or its findings definitive; but we feel the satisfaction of having searched intensively and extensively for insights into a complex and urgent set of problems.*

In this effort, the Committee has been the beneficiary of impressive help from many quarters. We have had the fullest cooperation from all who are involved in the education of the deaf, whether under public or private auspices, at the local, state, and national levels. The staff members of your own Department have been genuinely helpful, though unobtrusive, in their service to the Committee. In particular, Mr. Paul Pyle of your office has earned the Committee's deep appreciation for his unfailing courtesy and help. We wish to express also our satisfaction with the contractual arrangements your office concluded with Public Administration Service to furnish staff assistance to the Committee. The staff members, and most especially their able supervisor, Mr. Ralph Spear, were consistently helpful, and their services invaluable.

---

*In only one instance does the Committee feel inadequately informed. As this letter of transmittal was in preparation, the Committee learned, through a public announcement, of the decision of Gallaudet College to create a graduate school. And though we have not had an opportunity to hear the justification for this policy decision, we must inform you (as our comments in Chapter IV would suggest) that we are profoundly skeptical of the advisability of this action.

We are, Mr. Secretary, grateful for the opportunity afforded us by service on your Committee, hopefully to make some contribution to the improvement of the educational, occupational, and social well-being of the deaf in our society. We have been impressed by the pride and courage of our deaf citizens in overcoming a handicap the full implications of which are little appreciated by the general public. It is our earnest hope that a wider and deeper understanding of their problems will lead to a greater effort to provide educational opportunity comparable to that generally afforded our young people; for it is upon a foundation in education that personal, social, and economic satisfactions are built.

Sincerely yours,

THE ADVISORY COMMITTEE
ON THE EDUCATION OF THE DEAF

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SUMMARY AND RECOMMENDATIONS

The American people have no reason to be satisfied with their limited success in educating deaf children and preparing them for full participation in our society.

Less than half of the deaf children needing specialized preschool instruction are receiving it.

The average graduate of a public residential school for the deaf--the closest we have to generally available "high schools" for the deaf--has an eighth grade education.

Seniors at Gallaudet College, the nation's only college for the deaf, rank close to the bottom in performance on the Graduate Record Examination.

Five-sixths of our deaf adults work in manual jobs, as contrasted to only one-half of our hearing population.

This unsatisfactory state of education of the deaf cannot be attributed to any lack of dedication of those who teach and work with the deaf. The basic explanation lies in our failure to launch an aggressive assault on some of the basic problems of language learning of the deaf through experience or well-planned and adequately supported research, and in our failure to develop more systematic and adequate programs for educating the deaf at all levels.

Today, the problem of teaching the deaf is further complicated by the fact that a greater proportion of our deaf young people were born deaf, or were deafened before language had been acquired, than was the case 25 years ago. But while the problem of teaching the deaf has become more difficult, economic and scientific advances are requiring higher levels of educational preparation of young people entering the world of work.

Needed Improvements

Our responsibility in the education of the deaf is the same as it is for all our youth--to assist them in developing their talents fully, to prepare them to be responsible citizens, and to offer them stimulus and opportunity for cultural enrichment of their lives.

To meet that responsibility, we must move promptly and vigorously on several fronts. Of prime importance, we must expand and improve our programs of early attention to the deaf child. Without such early attention the deaf child's difficulties in acquiring language, the indispensable tool of learning, are greatly increased.

The infant with a hearing defect or a potential hearing defect should have a better chance of being identified in the early months of life and put in touch with better and more generally available clinical facilities and multidisciplinary services for diagnosis and evaluation. Parents of deaf children need more readily available counsel, guidance, and instruction. Programs designed to facilitate language and speech preparation for very young deaf children as well as programs to make maximum use of residual hearing should also be more generally available.

Significantly improved education of the deaf is also unlikely without a new research effort to extend our knowledge about the deaf and how they learn. For many years, the field has been characterized by a lively "methods" controversy. On the one hand, there are those who feel strongly that only oral methods should be employed. On the other, there are those who feel that the deaf will never really be happy with only oral communication, preferring to adopt at an early age forms of manual communication which are easier for both pupil and teacher. The majority of educators in the field appear to favor a combination of methods that permits use of both oral and manual communication. Also, there has been controversy between those who favor educating the deaf in residential schools and those who favor day schools for such education. Because of these controversies, some have said that for 100 years emotion has been accepted as a substitute for research in the education of the deaf.

In 1964, only a fraction of one per cent of the cost of educating the deaf was devoted to finding better ways of educating them. This, we believe, is too little and is a major shortcoming of our present efforts. There is no reason to believe that we have reached the limit of human potential in educating the deaf. The longer we delay in supporting substantial, well-planned programs of research into more effective ways of teaching language and into a variety of other areas which offer promise of improvement, the more we waste the potential talents and skills of those maturing young people whose only difference is that they cannot hear.

Special emphasis on early diagnosis and on new knowledge through research must also be accompanied by attention to other important specific deficiencies in education of the deaf.

For example, deaf young people whose learning problems are complicated by the presence of one or more additional handicaps require special attention. The education of the multiply handicapped deaf person is an almost untouched field.

Of more general concern, any deaf child with the desire and requisite ability should have the opportunity to complete a true high school program. Yet, there are probably no more than a half-dozen true high school programs for the deaf in this country. The changing occupational outlook for all young people requires a better foundation in English, science, and mathematics, subjects in which the language and speech problems of the deaf continue to create special difficulties.

There is a particular danger that the deaf may be early victims of a changing occupational outlook. While in the past vocational education programs for the deaf have been successful at the mechanical and operative level, recent and anticipated future developments are and will be creating a need for more sophisticated occupational education for the deaf, realistically geared to the more complex demands of the future.

Post-secondary educational opportunities for deaf young people are, with the exception of the liberal arts program at Gallaudet College, extremely limited. The deaf should have access to a full range of post-secondary occupational and adult education available to the general population and be prepared to benefit thereby.

While marked improvements have been made at Gallaudet College during the past decade, its role needs sharper definition, and certain aspects of curriculum and faculty preparation need strengthening. In addition, certain features of its governance would benefit from changes.

There is a general lack of systematic approach to the education of the deaf. With few exceptions, state programs are aggregations of program elements (e.g., some preschool classes, a few day classes, or a day school, a state public residential school, etc.), rather than planned and coordinated systems.

All states could profit from a careful appraisal of the extent to which they provide comprehensive programs. In those states with too few deaf children to warrant complete systems, two or more states should join their efforts to assure adequate programs.

A satisfactory system for the education of the deaf requires the availability of many medical, audiological, psychological, social service, and other diagnostic services not routinely associated with education. Such services are, however, commonly accepted as necessary adjuncts to the field of special education, of which the education of the deaf is a part. As its name suggests, special education requires particular attention to the needs, capabilities, and limitations of the individual child. Educators of the deaf should recognize that important new services and facilities now being brought to bear on the whole field of special education offer promise of alleviating some old problems persistently encountered in the education of the deaf.

In summary, there is an urgent need to raise the level of hopes and expectations in the education of the deaf. Deaf individuals and their teachers should not accept a severely limited goal in life for the deaf. A look at the history of the field makes it clear that there have been important advances in the past. There is no reason to conclude that the future is without opportunity for further similar advances.

Recommendations

Planning

The Committee believes that as in other fields of public education, the states and their political subdivisions should, wherever feasible, constitute the basic unit in the education of the deaf, with appropriate necessary help from the Federal Government. In order to hasten a general improvement in the preschool, elementary, and secondary education of the deaf, the Committee recommends:

1. That the Congress of the United States be requested to authorize the appropriation of funds for a program of planning grants to the states, similar to the program of mental retardation planning grants, to be used to assist and encourage the states to develop individual state plans for the education of the deaf. A part of the funds thus appropriated should be reserved to the Commissioner of Education to facilitate regional and interstate planning.

2. That the Commissioner of Education convene a national conference of federal, state, and local governmental and professional leadership to consider effective ways to encourage the development of state plans for the organization of educational and auxiliary services for the deaf.

   The conference agenda should include consideration of these points, among others: (a) that state plans contemplate taking full advantage of the potential of other kinds of special education programs; (b) that the plans cover provision for all of the essential elements of a system for the education of the deaf, with particular attention to preschool programs for deaf children and educational and counseling programs for their parents; (c) that the plans place leadership responsibility for the program of the education of the deaf in the department of state government having responsibility for general public education within the state; (d) that the plans include opportunity for interstate arrangements for the utilization and support of essential specialized elements of the system which it may prove infeasible for a single state to support adequately unaided (precedents for such arrangements may be found in various regional interstate agreements in the field of general education and in the common practice in the northeastern states in the education of the deaf); and (e) that states be encouraged to publicize and share with each other completed plans, even though the state plans were developed to meet their particular needs.

Post-Secondary Education

To correct the deficiencies in post-secondary educational opportunities for the deaf, the Committee recommends:

1. That the Office of Education inaugurate a 5- to 10-year demonstration program involving the establishment of special facilitative services for deaf students at cooperating colleges and universities throughout the country designed to enhance the likelihood of academic success of deaf students therein. Emphasis in the program should be initially on fields of study not generally available to deaf students, such as engineering, architecture, and the professions, but not to the exclusion of liberal arts curricula.

   The demonstration program should be initiated on a modest basis, with perhaps six to eight institutions participating. The progress of the program should be carefully studied and evaluated to assess (a) the educational and social effects, (b) the cost of such a program, as contrasted with the cost in a specialized college for the deaf, and (c) any emerging deficiencies that should be corrected by prompt action.

2. That a similar demonstration program be undertaken at a number of junior colleges throughout the country which are designated as "area vocational education schools" by the Commissioner of Education. Emphasis in selection should be placed on those institutions serving areas in which substantial numbers of deaf students are to be found, but where no residential vocational education schools are contemplated under Section 14 of the Vocational Education Act of 1963.

3. That similar facilitative services for deaf students be provided on a continuing basis in the residential vocational education schools approved by the Commissioner of Education under Section 14 of the Vocational Education Act of 1963, and that sufficient funds be included to finance them.

4. That the Office of Education consider in the light of its continuing evaluation of the foregoing demonstration programs whether the vocational and advanced technical educational requirements of deaf students are being adequately met, or whether there is a need for federally supported regional vocational education schools and a national technical institute exclusively for the deaf.

5. That the Office of Education prepare, distribute, and publicize informational materials designed to stimulate through state adult education programs the offering of classes for the adult deaf; and that state educational authorities seek the participation of organized groups of adult deaf and their leaders in initiating such programs.

Gallaudet College

With respect to Gallaudet College, the Committee recommends:

1. That the Federal Government continue to support Gallaudet College in its efforts to maintain and improve its status as a liberal arts college to serve the nation's deaf.

2. That the budget of Gallaudet College be increased in support of the following measures: (a) an increase in the number of course offerings in the natural sciences and the social sciences to make possible a wider range of electives; (b) a program of orientation that will permit new faculty members, at full pay, to devote at least three months to achieving a deeper understanding of the educational deprivation which the students have inevitably suffered because of their handicap, and to learning effective communication with the deaf; and (c) a liberalized leave policy to encourage faculty members to pursue programs leading to the doctoral degree.

3. That any plans for future growth of Gallaudet take into account the possibility of more deaf students studying in colleges for the hearing, with special help; and that, particularly if the recommendations of the Committee with respect to post-secondary education of the deaf are accepted and put into practice, the college authorities proceed with particular caution in expansion planning until the recommended demonstration program has been evaluated, possibly raising its admission standards somewhat as a control on application pressures if they develop in the meantime.

4. That Public Law 420, 83rd Congress, be amended to increase the number on the board of directors to 20, that the board seek to elect new members from a broader geographical base, that all board members serve for fixed terms of perhaps 5 years, that the board strive to increase alumni representation, and that the president of the college should serve as an ex officio, nonvoting member of the policy-making board.

Federal Activities

In order to bring about more effective coordination of Federal programs and activities bearing on the education of the deaf, the Committee recommends:

1. That a continuing national advisory committee on the education of the deaf be appointed by the Secretary of Health, Education, and Welfare. The committee's responsibilities should include: (a) stimulating the development of a system for gathering information on a periodic basis in order to make it possible to assess progress and identify problems in the education of the deaf; (b) identifying emerging needs and suggesting innovations that give promise of improving the educational prospects of deaf individuals; (c) suggesting promising areas of inquiry to give direction to the research effort of the Federal Government in education of the deaf; and (d) advising the Secretary on desirable emphases and priorities among programs.

   The committee should include representatives of the disciplines involved, of educators both of the deaf and hearing, and of the deaf themselves. Representation should not be institutional; rather, individuals should be selected on the basis of their abilities to make constructive contributions in such a forum.

   Most importantly, the committee should be expected to make creative contributions. It should not be permitted to become purely a watchdog of conventional programs.

2. That assistance be provided to the Secretary of Health, Education, and Welfare in carrying out his responsibilities for the coordination of the several educational and related program activities that have bearing upon the education of the deaf, both directly and indirectly. It is recommended that there be within the Office of

the Secretary a position recognized as primarily concerned with the education of the deaf. This should be a staff position. The incumbent should have no authority to direct programs, but should be prepared to use his good offices to assure that programs operate in harmony with each other and that they are mutually supporting. The responsibilities of the position should be clearly defined and should include (a) serving as a focal point within the Department on all matters pertaining to the education of the deaf; (b) providing continuing liaison with the advisory committee on the education of the deaf; (c) maintaining current knowledge of all programs within the Department affecting the education of the deaf either directly or indirectly, including programs for other groups of handicapped persons to which the problems of the deaf might be related; (d) participating in the review of pertinent proposed programs and budget requests; (e) maintaining contact with institutions and associations concerned with overcoming the handicap of deafness, with particular regard to educational needs and proposals; and (f) working cooperatively with all departmental units involved in education of the deaf.

Research

There is no quick and easy solution to the problems of establishing a comprehensive and effective research effort into the complexities of the education of the deaf. The basic requirement is that the problem be recognized as being complex, requiring broad programs of research utilizing a multidisciplinary approach, and that the intent of the Federal Government to support a substantial and continuing research program be made known. To this end, the Committee recommends:

1. That the Division of Handicapped Children and Youth, Bureau of Educational Research and Development, Office of Education, be designated by the Secretary of Health, Education, and Welfare as the central point of focus and planning for Federal research efforts in the education of the deaf.

2. That a panel be convened to develop a proposed program of comprehensive research into the problems of education of the deaf; and that, subject to the panel's concurrence, such proposal contemplate major emphasis on programmatic research utilizing a broad multidisciplinary approach, and involving support of two or more research centers, preferably in university settings.

3. That the panel be furnished, for the above purpose, necessary full-time staff assigned to sole responsibility of serving the panel in its initial identification and planning endeavors; and that funds be made available to the panel to permit it to enlist the aid of consultants as it deems necessary for this purpose.

4. That the panel invite the cooperation of other elements of the Department which support research related to or in the education of the deaf.

5. That the panel take note of the several unmet research needs set forth in the Committee's report in developing its plan.

6. That the proposed program developed by the panel not be constrained by budgetary considerations, but that it represent the combined judgment of the panel on the scope and emphasis of the program and on the level of effort needed; and that it be phased in accordance with the probable increase in competent research personnel attracted to the field.

7. That the panel specifically consider the desirability of a program of research and fellowship grants, supported by Federal funds, as a method of attracting competent young people to the area of research in the education of the deaf.

INTRODUCTION

In approaching its task, it has been necessary for the Committee to recognize and consider the divergent views with respect to the primary objectives, the proper methods, and the organization of educational programs for the deaf and to distill therefrom its own views and standards against which to develop its findings and recommendations.

To some members of the Committee, this was the first opportunity to become intimately acquainted with the problems, goals, and conflicts in this field. For the benefit of those readers of this report who are not familiar with the difficulties that beset a deaf child eager to learn, it may be worthwhile to recapture some of that early experience.

The Handicap of Deafness

For a child who is born deaf, or becomes deaf in his early years before the acquisition of language, there are hurdles to be overcome that stagger the imagination. Most such children are normal in other ways--in native intelligence, in vocal apparatus--but they cannot hear the spoken language which is absorbed and spoken relatively effortlessly by hearing children. Language is the indispenable tool of learning acquired with little effort by the hearing child, but it is acquired only after great effort and determination by deaf children and their dedicated teachers.

For a deaf child to learn to speak and to read speech on the lips and the expressions of others is a minor miracle--but a miracle that is happening every day in hundreds of classrooms for the deaf throughout the country. Most persons deaf from birth or early childhood have somewhat distorted speech, not as a result of any defect in their speech apparatus, but because their deafness denies them the opportunity to hear their own peech and to monitor its quality against the speech of others.

The doggedness and courage of the deaf person and the dedication of his teachers as together they battle to achieve communication--the use of language--and to use this vital tool in the learning process are deserving of the best that our society can offer in the form of understanding, of help, and of ingenuity in finding ways to make the task easier.

The Deaf Population

It is recognized that the deaf person must be described in terms of a number of variables which may interact with each other to varying degrees. Some of these variables are:

1. The degree of hearing loss. This is the traditional psycho-acoustic variable for measuring deafness. The deaf individual can be described in terms of his degree of loss of awareness of sound. A loss of at least 75 or 80 decibels in the better ear is often considered to be a dividing line between the deaf and the hard of hearing so far as degree of loss is concerned. It should be remembered, however, that individual differences are of great importance.
2. Age at onset of hearing loss. The age at which an individual's hearing becomes impaired is of crucial importance in the educational process. Two individuals might have exactly the same hearing loss as measured in decibels with an audiometer; yet, if one individual were born deaf and the other became deaf at the age of 15, there likely would be profound differences between them in such factors as educational achievement, language development, and speech and speechreading ability.
3. The site of the lesion. This refers to the part of the hearing apparatus in which damage occurred to cause loss of hearing. If the damage is in the middle ear, the individual usually will have what is termed a conductive hearing loss. This type of loss is only partial and usually can be helped greatly with the use of a hearing aid. If the damage is in the inner ear it is referred to as sensory-neural and often cannot be helped greatly with an aid. If the damage is in the cerebral

cortex it is referred to as central deafness. Most of the people whom we refer to as deaf have sensory-neural hearing loss caused by destruction of parts of the inner ear.

4. Method of communication used by the deaf individual. There is variation in the methods used by deaf persons to communicate with each other and with hearing persons. Some deaf persons rely almost exclusively on speech and speechreading for communication. Others use mostly the language of signs. Still others depend largely upon the use of finger spelling. Probably the majority use various combinations of these methods as well as written communication.

5. The deaf person's attitude toward his deafness. The reaction of the deaf person to his deafness has important implications for his psychosocial and educational adjustment. He may react by striving to become a member of the hearing community and by refraining from participation in the deaf community. He may react in exactly the opposite manner and shun participation in the hearing community. He may endeavor to function as well as possible in both the deaf and the hearing communities.

These are only a few in the complex of variables which must be considered when attempting to describe the deaf population. Each of the variables should be considered as a continuum along which deaf persons may be distributed. It is difficult, therefore, to describe or define the "typical" deaf person. Individuals who are termed deaf may vary widely in degree of hearing loss, in age at onset of hearing loss, in methods of communication used, in their attitudes toward their deafness, and in many other factors. For example, an individual might be classified audiometrically as being hard of hearing on the basis of his decibel loss and yet be considered sociologically as deaf on the basis of his acceptance of, and gravitation to, the deaf community rather than the hearing community. Similar interactions are possible among the other variables.

In spite of the wide variation among deaf persons on the dimensions described, some factors are common to most deaf individuals and serve to some extent to describe the deaf population. Thus deaf persons have hearing losses severe enough to produce serious disorders of communication and must be taught language and communication by special educational procedures. Deaf persons also have in common the fact that they are coupled to the world visually. Although recent technological advances in the design and construction of hearing aids, in addition to increased emphasis on auditory training procedures, have undoubtedly improved the utilization of residual hearing by deaf persons, it is likely that most of them still depend primarily on their vision for communication and for the acquisition of information. If one had to select a single factor as being descriptive of deaf people in general it would be this factor of being linked to the world visually. The deaf person receives communication primarily through his eyes: whatever hearing he may have left is a supplement to his visual perception.

There is no reliable census of the deaf population. Estimates, however, place the number of profoundly deaf persons at between 200,000 and 250,000. These estimates refer to persons whose hearing is "non-functional" with or without a hearing aid--those who are linked to the world primarily through their eyes. The estimates reflect a prevalence rate commonly encountered in the literature--1.2 to 1.4 per thousand--which seems to remain reasonably constant.

This report addresses itself to the problems of education of the deaf, to the extent that it is possible to separate them from the hard of hearing. It should be borne in mind, however, that there are many times as many hearing-impaired children who are classified as hard of hearing. These children also require special attention in varying degrees.

The Methods Controversy

Educators of the deaf differ on the most useful method of communication for the deaf--the oral or the manual.

Advocates of the purely oral method of instruction concede that speech and speechreading, aided by auditory training to take advantage of even small residual hearing, may be more difficult and take longer to learn than manual methods. They maintain, however, that it prepares the deaf child for wider horizons and greater opportunities in the hearing world culturally, socially, and economically. It prepares the child to take advantage of a wider range of educational opportunities than are likely to be offered by special programs for those who can easily communicate only manually. Furthermore, they consider that it makes possible a fuller, more satisfying life. Those who favor the oral method also point out that manual communication is more easily acquired, and that a child who is taught manually is less likely to put forth the extra effort required to achieve speech and speechreading.

Those who favor the employment of manual methods are less likely to be purists. In fact, in the course of hundreds of discussions by the staff, not a single person was encountered who did not agree with the desirability of oral instruction for young deaf children. The difference appears really to hinge on how readily one gives up on oral instruction. The advocates of manual methods emphasize that inevitably some children will be unable to acquire usable speech or to learn speechreading well enough to communicate effectively. They maintain that a child should not be denied the opportunity to learn a form of communication within his capabilities. They contend that it is easier to communicate subject matter in the classroom by manual methods. Some advocate the combination of oral methods with finger spelling, a combination that keeps the English language as the symbol system of instruction and communication. Others favor employing all methods--oral, finger spelling, and the language of signs--in an effort to make the learning process easier. They also maintain that it is less of a strain on the deaf person to communicate manually, and point to the fact that most deaf adults prefer to use manual communication among persons--deaf or hearing--who know it.

This Committee, recognizing that it cannot resolve a question that has been a lively one for the past hundred years in this country, feels, however, that a point of view with respect to the question is essential in setting goals for the education of the deaf and in evaluating the effectiveness of educational programs. It has therefore arrived at this consensus:

A clear difference is recognized between primary reliance on a restrictive means of communication in the educational process and such reliance in later life. It is generally agreed that primary emphasis should be placed on teaching speech and speechreading to young deaf children. The Committee does not rule out the employment of finger spelling as an adjunct to oral methods in language teaching if the combination proves more effective, since the symbol system of the spoken and written language is retained. In order to encourage keeping open as wide a range of subsequent choices as possible for deaf young people, the Committee urges that educators of the deaf continue to place emphasis on oral methods, but that manual methods be employed in individual cases when it is clear beyond a reasonable doubt that success by oral methods is unlikely.

There will continue to be failures in the oral method, and facilities for teaching in the language of signs should therefore be retained. Furthermore, many deaf adults will prefer the use of the language of signs and the company of the deaf as an easier and more relaxing social experience. They have a perfect right to make that choice, and no aura of failure or opprobrium should surround it. The Committee believes, however, that the option should be kept open for deaf children to make such a choice as responsible adults. The choice should not be made for them in the schools unless it is clear after careful professional analysis on an individual basis that the choice cannot be kept open.

The Educational Institution

Educators also differ on the setting in which deaf children should be taught. Feelings are perhaps not as strong on this question as on the methods question, but there are distinct differences. Some favor special residential schools, which were the first setting for formal education of the deaf in this country, and which remain the predominant facility today. Others see distinct advantages in special day schools for the deaf in communities large enough to support them. Both groups, however, are inclined to join in criticism of special day classes for the deaf unless there are enough deaf children to warrant an adequate program of progressive graded classes. Most day school advocates look with favor on secondary school classes in which deaf children are integrated with hearing children (but with specialized help made available as needed), while most residential school advocates generally oppose such integration, except in the case of the most gifted deaf children.

The Committee feels that there is a proper place in a good system of education of the deaf for each of the facilities--specialized residential schools, day schools, and day classes and for the use of classes in which deaf and hearing children are integrated. Local conditions and needs, as well as the needs and abilities of individual deaf children, will inevitably play a part in decisions with respect to facilities designed to serve the deaf children of each community.

The Goals of Education of the Deaf

The Committee accepts as the goals for education of the deaf those which are accepted for education generally--to prepare our people to develop their talents fully, to prepare them to be responsible citizens, and to offer them stimulus and opportunity for cultural enrichment of their lives. In the case of the deaf, much special help and assistance is necessary if this goal is to be made possible of attainment. The recommendations in this report are intended to identify some of the kinds of special help needed at this time.

The Teachers of the Deaf

The report could not be completed without comment on the sincere dedication of those who have devoted their careers to the education of the deaf. In the course of the study many sharp differences of opinion among them have been encountered, but in each case they have been honest differences in the search for the best solutions for the deaf. For many years teachers, supervising teachers, principals, superintendents, and others in the states and localities, and the personnel of Gallaudet College and federal agencies have given generously of themselves in the difficult task of teaching the deaf. No recognition in this report can be adequate to their contribution, but the report can reflect this Committee's appreciation of their dedication and service.

I. PRESCHOOL, ELEMENTARY, AND SECONDARY EDUCATION

The educational system for the deaf is characterized by great variety. In a few states there are virtually no programs; in many more there are many types of programs. Indeed, many will object to the use of the term "system" to characterize the educational programs for deaf children in this country. The objection would be well taken in those states where there are few program elements or none at all. There are many states, however, in which many elements provide alternatives to meet the different individual needs of deaf children and in which there exists a structured relationship among the program elements. In these states an orderly process of selection among them is encouraged.

In the states where such a system can be discerned, one finds usually a consultant for the deaf within the unit of the state education agency concerned with the education of exceptional children. The position may be one of moderate authority or it may be one which is dependent for its effectiveness on the persuasive talents and ingenuity of the incumbent. Some of the most effective work observed in the course of this study was being accomplished where the latter was the case.

Elements of an Educational System for the Deaf

An adequate system for the education of the deaf through secondary school includes the following elements:

1. A regular procedure and the availability of detection services for the early identification of deaf children.
2. The availability of adequate clinical facilities and multidisciplinary services (medical, paramedical, psychological, audiological, sociological, etc.) for diagnosis and evaluation of children with hearing losses.
3. The availability of continuing counseling, guidance, and instruction for the parents of deaf children.

4. The availability, as indicated in individual cases, of hearing aids appropriate to the kind and degree of hearing impairment to enable the child to make maximum use of any residual hearing.

5. Programs designed to facilitate language and speech preparation for children, including those as young as one to two years of age.

6. Specialized programs from very early instruction through a full secondary school course in standard graded classes, under trained teachers of the deaf functioning under trained and experienced supervising teachers. Such programs to include:

   a. The availability of oral instruction for the full course for those able to take advantage of it.

   b. The availability of supplemental instruction by manual methods for those who show inability to make progress under purely oral instruction.

   c. Continuing emphasis throughout the program on language skills in all subject-matter courses.

   d. Provision for continuing assessment and reassessment to delineate further each child's educational program, including the availability and use throughout the program of clinical facilities and medical and other services for the continuing diagnosis and reevaluation of deaf children.

   e. The availability on a continuing basis of counseling and personal, educational, and vocational guidance for the individual deaf students.

   f. The availability, maintenance, and use of auditory training equipment in the classroom.

   g. The availability of vocational education courses to be used, as indicated on an individual basis, for terminal vocational instruction where desirable and practicable, or otherwise for vocational orientation for those students who will profit from such orientation.

h. The availability of a college preparatory program for those students who elect it.[1]

Such specialized programs should, where feasible, be available on either a day school or day class basis or in a residential school, according to the total needs of the individual deaf child. In either case, the group served should be large enough to support an adequate program, as outlined above.

7. A program of integrated classes with hearing students, including the provision of resource teachers available for help and counsel, for those deaf students able to profit from such programs.

8. A program of further specialization for the education of deaf children afflicted with additional handicaps which prevent them from profiting fully from the regular programs for the education of the deaf or whose presence in the regular classrooms for the deaf interferes seriously with the regular program of instruction. Where numbers of such students make it feasible, such a program should be an organized group program, supplemented by the availability of visiting teachers to serve children in their homes as individual circumstances require. In any event, it should have available a full range of pertinent clinical services to deal with the complex problems of children with multiple handicaps.

Programs and services for the education of the deaf as presently offered will be examined in the light of the foregoing desirable elements. It has not been possible with the time and resources allotted to the Committee to develop and apply measures of effectiveness to individual state and local programs. Evaluative comments will thus be generally limited to gross application of judgment to the achievements of the sum of state programs for the education of the deaf.

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[1] The elective process should of course include consultation with parents and an evaluation of the student's progress and capabilities. Educators of the deaf should be reluctant to deny the opportunity of such election to students. Repeated examples have been encountered of deaf children whose strong motivations have overcome deficiencies which might have occasioned a school decision against a college preparatory program.

Case Finding, Diagnosis, and Evaluation

Our nation has no system of universal health care under which a reasonably "foolproof" system for early identification of hearing loss in children might have been developed. Suspicions of such loss in the early months or years of a child's life must arise in the minds of parents, pediatricians, family doctors, nurses, social workers, clinic workers, and others who come in contact with very young children. All states participate in the federally aided programs of maternal and child health services and child welfare services, and all but one in the crippled children's service program. These programs have brought trained health and welfare workers into contact with an increased number of families, but the total served still represents a small segment of the population. Thus, for most of the population the burden of possible detection of hearing loss in young children falls on parents and pediatricians or family physicians.

There is no reason to believe that very large numbers of cases of children with serious hearing losses go undetected into the school years, or that a great many cases of deafness go undetected to the age of, say, three or four; but the vital importance to the education of deaf children of early detection of the defect requires that we improve chances of establishing the facts in questionable cases as early as possible.

The hospital where the child is born provides the best organized opportunity for such discovery. (In the 20 years between 1940 and 1960, the percentage of children born in hospitals increased from 56 to 97.) A system of testing shortly after birth, however, would require more reliable instruments than are currently available and their widespread distribution to hospitals. Probably the best that can be done at present is for physicians to alert parents routinely to the danger signals to watch for and to urge upon them prompt testing when such signs appear and to maintain a close follow-up on newborn high-risk babies. Organized efforts should be made, beginning in the medical schools, to be sure that physicians are themselves trained to be alert to such danger signals. Hearing tests are available in all states at schools for the deaf, college and university clinics, hospital clinics, or facilities of the state crippled children's societies. In addition, otological examinations are offered at one or another of those facilities in 30 states.[2/]

A systematic approach worthy of attention is that employed in one state which conducts more than 250 clinics yearly in about 40 communities throughout the state. Children in need of diagnostic services offered by the State Division of Services for Crippled Children are referred by parents, doctors, nurses, etc. Recommendations are made in writing upon completion of the diagnostic survey to the child's personal physician. The child is also referred for a complete otological examination, if it is indicated, or for a more comprehensive hearing evaluation at one of the many hearing centers located throughout the state.

The effectiveness of early identification, diagnosis, evaluation, and training is indicated by experience in Europe. National medical programs there facilitate early identification of hearing problems and make professional service more readily available to all children who need such assistance. During the 10 years from 1953 to 1963, enrollment in schools and classes for the deaf in England decreased by about 5 per cent, but that in schools and classes for the partially hearing increased by a similar rate. A similar shift was experienced from special schools and classes for the partially hearing to integrated classes with hearing students. This was during a period attended by the development and increased availability of improved services at all levels. The fact that enrollment in special schools and classes did not follow the population increase suggests that the availability of such services is at least one of the causative factors in the elevation of educational levels for a significant number of children with hearing losses.[3/]

Parental Counseling and Education

Parents who discover for the first time that they have a deaf child are likely to experience a feeling of helplessness as they contemplate the problem of communicating with their child. In virtually all states, when a child has been identified as having a severe hearing loss, information

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[2/] American Annals of the Deaf, Vol. 109, No. 1, January, 1964.

[3/] See Appendix C.

is available to the parents through either the public or private agency involved as to sources of counsel and guidance to the parent. In many states, however, there is no organized program designed to furnish such help, and the counsel and guidance is less than readily available. A common practice is to suggest that the parent consult the principal or supervisor of either a day school or class for the deaf or of the state residential school for the deaf. This may involve a substantial amount of travel and no continuing counsel. A popular alternative is to enroll in the correspondence course for parents of deaf children conducted by the John Tracy Clinic in Los Angeles. This course is designed to assist parents in coping with early language-learning and other problems of very young deaf children in the home. Film training programs are also offered by the Clinic, and these have earned enthusiastic responses.

This course is highly regarded by educators of the deaf for the quality of its content, and it is a requirement of admission of a deaf child to the preschool facilities of several private centers that the parents agree to enroll in the course. It is clear, however, that a continuing competent resource close at hand, available for periodic face-to-face discussion, would be likely to promote fuller understanding on the part of the parents and would provide an easier opportunity for counseling on specific problems encountered.

In most European countries, the organized public program for the education of the deaf offers direct service to parents through the counseling service of home teachers, peripatetic teachers, or home counselors. They make contacts with parents of babies as young as nine months when hearing problems are suspected and continue counseling services to the parents on a regular basis when hearing disorders are discovered.[4]

Many examples could be cited of similar services available in this country from public health and education agencies and from private organizations, but there is no organized systematic resource in each state designed to perform this important function, with the result that adequate and continuing counseling is, practically speaking, unavailable to many parents of deaf children.

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[4] See Appendix C.

Preschool Programs

In the fall of 1963, according to the statistics reported in the American Annals of the Deaf, there were 4,236 children under the age of 6 enrolled in schools or classes for the deaf in the United States. While statistics on the prevalence of deafness are not sufficiently reliable or refined to permit a precise conclusion, a conservative estimate is that at least twice that many children in that age group were in need of such a program. Despite this probable shortfall in meeting the important needs of this group of children, a backward look reveals that current enrollment is up almost 150 per cent from 1949 when the same source reported 1,795 children under 6 enrolled. During the same period, total enrollment in all schools and classes for the deaf increased by approximately 50 per cent. While some of this disparate increase is undoubtedly attributable to more complete reporting coverage, it is clear that there has been a very considerable growth in preschool programs.

There is reason to believe, however, that in too many cases this growth does not represent building on the best and most needed foundations. The primary goals of preschool education for deaf children are to build a strong language foundation and to open up the world of speech; but many of the programs have been criticized as consisting of simplified versions of elementary school practices or of unstructured free play. While such programs may be of psychological and social benefit to young deaf children, they represent a tragic failure to capitalize on the opportunity to build a strong and useful educational foundation.

While there is probably not a uniformly proportionate distribution of deaf children among the states, the disparity of coverage reflected in Table 1 suggests that some of the grosser discrepancies are attributable to the unevenness of preschool program offerings.

Table 1

STATES RANKED BY NUMBER OF CHILDREN UNDER AGE 6 ENROLLED IN SCHOOLS AND CLASSES FOR THE DEAF, PER 10,000 CHILDREN UNDER AGE 5 IN THE CENSUS OF 1960

State	Deaf Children Under 6 in School, Per 10,000 Children	State	Deaf Children Under 6 in School, Per 10,000 Children
District of Columbia	5.3	Hawaii	1.6
Oregon	5.1	Pennsylvania	1.6
Washington	4.0	Kansas	1.5
Rhode Island	3.7	New Hampshire	1.5
Connecticut	3.5	Tennessee	1.5
Massachusetts	3.5	Kentucky	1.3
California	3.4	Missouri	1.3
Vermont	3.2	Iowa	1.2
Wisconsin	3.1	South Dakota	1.1
Maryland	3.0	Utah	1.1
Minnesota	2.9	Virginia	1.1
Nebraska	2.7	New Jersey	1.0
Wyoming	2.7	Georgia	.8
Indiana	2.6	Mississippi	.8
Oklahoma	2.6	South Carolina	.8
Michigan	2.3	North Carolina	.7
Texas	2.2	Arkansas	.6
Illinois	2.1	Maine	.6
New York	2.1	Alabama	.5
New Mexico	2.0	West Virginia	.1
Ohio	2.0	Puerto Rico	.1
Louisiana	1.9	Alaska	0
Arizona	1.8	Delaware	0
Idaho	1.7	Montana	0
Colorado	1.6	North Dakota	0
Florida	1.6	Nevada	0

Source of basic data: American Annals of the Deaf, January, 1964.

Residential Schools

Public residential schools account for more than half of the deaf students reported receiving instruction in the schools and classes for the deaf according to the annual summaries in the American Annals of the Deaf. The Annals reports, in its January, 1964, issue, 69 public residential schools (excluding Gallaudet College) serving 16,305 students and 17 denominational and private residential schools serving 1,373 students.[5] The Committee's questionnaire brought forth responses from 59 public residential schools--those serving 90 per cent of the pupils enrolled in such schools--and from 9 of the private residential schools--those serving 57 per cent of the pupils enrolled in such schools. The response from these substantial samples is reported in Appendix D, with respect to selected characteristics and features, in the belief that it throws significant light on the role and functioning of such schools.

There is, of course, no such thing as a "typical" public residential school, given variations of size, objectives, grades, methods, support, teacher qualifications, and course offerings. It may help those unfamiliar with such schools to visualize the program, however, if a kind of composite picture is presented from the experience of visiting some 31 such schools in 24 states. Public residential schools are responsible for the education of more than half of the deaf children in the country, and most of them offer at least partial secondary school programs.

Residential schools for the deaf offering a high school curriculum are generally organized into the following departments or schools: the Lower School, including preparatory grades and the first through fourth grades; the Middle School, including the fifth through eighth grades; and the Upper School, including the ninth through twelfth grades. Several residential schools operate a Primary or Preparatory School which administers and supervises their preparatory grades, usually two or three. Some vary from this general pattern, having a preparatory, elementary, and secondary school, with elementary from 1-6 grades and secondary from 7-12 grades.

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[5] Actually, several privately-owned and operated schools are included in the classification of "public residential schools" used by the Annals. The distinction rests on whether or not public funds are used to support the school by tuition payments or otherwise. In order to avoid confusion, the Annals usage has been retained in this discussion, but it should be remembered that about one-fifth of the "public residential schools" operate under private control.

After an evaluation at the residential school, children enter school at the first level of the preparatory program, usually at the age of four to five years. Advancement through the following one to three preparatory levels is at the rate of one level per year. Major emphasis during this period is on the development of communication skills, speech, speechreading, and auditory training, with some attention to simple reading, writing, and arithmetic. The oral method of instruction is used for children at the preparatory level. Where different levels of the preparatory classes are offered, an evaluation of the new student as to his academic and social potential is usually attempted and placement made in the indicated level.

When the student reaches the Lower School, certain accelerated classes are offered for the more capable students and language development and social readiness emphasized. Speech, speechreading, and the training of residual hearing continue to receive attention to prepare the student to understand and use language sufficiently to undertake academic work at the Middle School level.

Should the student progress satisfactorily, he enters at the age 10 to 12 the Middle School where the curriculum includes reading, language, science and health, social studies, arithmetic, and speech. Students at this level receive some orientation to vocational training. At the age of 15 or 16 years or during the Middle School, each student is carefully screened to determine if he will be able to graduate from the academic program, or if he should change to the vocational program.

Although students are given prevocational training in the Middle School, school curriculums for all students from preparatory to the Middle School are generally academically oriented. In the Upper School, students are divided into two major groups for the high school program--the college preparatory group and the vocational group. The college preparatory group receives some minimal vocational training while most of the time of the vocational group is spent in developing skills of a particular trade.

In the Upper School, the curriculum provides for additional occupational education, arithmetic (algebra), reading, social studies, biology, English, literature, physics, and world geography and history. Within very real limitations on equipment, space, and teachers available for vocational course offerings, an attempt is made to take into account the individual student's interests and aptitudes.

Students entering the residential schools are initially introduced to the oral method of communication; however, as individual difficulties are encountered, manual methods are employed either as a supplement to or as a virtual substitute for oral communication. Generally, such steps are not taken before about the fourth grade.

Students are usually advanced from one level to another on the basis of Stanford Achievement Test results. If a student has a test result indicating high fourth grade achievement, he is placed in the fifth grade and must achieve at fifth grade level before being advanced to the sixth grade. In other schools, promotion from one grade to the next is determined by the teachers' judgment based on the child's record, and there is no minimum grade achievement necessary for promotion to the next grade level. In most schools there are no social promotions, and advancement to the next level follows on the basis of achievement.

The public residential schools for the deaf together represent a substantial investment. The value of buildings and grounds reported in the January, 1964, issue of the American Annals of the Deaf for 62 of 69 such schools (excluding Gallaudet College) was $160,000,000, almost certainly a low estimate, considering the book values at which real properties are carried in most public accounting systems. The annual expenditure for operation of the schools and for capital improvements totals nearly $50,000,000.

The annual cost per pupil varies greatly, as might be expected, ranging from $1,204 at the Mississippi School for the Deaf to $3,704 at the Clarke School for the Deaf in Massachusetts. The information available for 62 schools is presented in Table 2.

Table 2

RANKING OF 62 REPORTING PUBLIC RESIDENTIAL SCHOOLS BY ANNUAL COST PER STUDENT

Residential School	Annual Cost Per Student	Residential School	Annual Cost Per Student
1. Massachusetts (Clarke)	$3,704	32. Wyoming	$2,349
2. Illinois	3,600	33. Idaho	2,323
3. New Mexico	3,480	34. Vermont	2,294
4. California (Berkeley)	3,410	35. Pennsylvania (Scranton)	2,275
5. California (Riverside)	3,386	36. Montana	2,180
6. New York (Rome)	3,383	37. Massachusetts (Beverly)	2,127
7. Michigan	3,293	38. Virginia	2,087
8. New York (White Plains)	3,269	39. Texas (Austin)	2,069
9. Rhode Island	3,221	40. Connecticut (American)	2,069
10. Oregon	3,101	41. Kansas	2,031
11. New York (Millneck Manor)	3,050	42. Indiana	2,018
12. Ohio	3,041	43. North Carolina	1,994
13. New York (Lexington)	3,013	44. Maryland	1,979
14. Maine	2,982	45. Alabama	1,971
15. Washington	2,960	46. N.C. School for Negroes	1,950
16. New York (St. Joseph's)	2,918	47. Utah	1,891
17. Iowa	2,800	48. Louisiana	1,879
18. New York (Rochester)	2,775	49. South Dakota	1,864
19. North Dakota	2,761	50. West Virginia	1,859
20. New Hampshire	2,732	51. Hawaii	1,823
21. Colorado	2,700	52. Missouri	1,795
22. New Jersey	2,699	53. Florida (St. Augustine)	1,757
23. Wyoming	2,670	54. Tennessee	1,703
24. Pennsylvania (Philadelphia)	2,668	55. South Carolina	1,683
25. Nebraska	2,650	56. Oklahoma	1,620
26. Minnesota	2,640	57. La. School for Negroes	1,553
27. New York (St. Mary's)	2,590	58. Kentucky	1,550
28. Connecticut (Mystic)	2,504	59. Arkansas	1,536
29. Va. School for Negroes	2,431	60. Georgia (Cave Springs)	1,463
30. Pennsylvania (Pittsburgh)	2,385	61. Arkansas School for Negroes	1,221
31. Arizona	2,357	62. Mississippi	1,204

Source: American Annals of the Deaf, January, 1964.

Day Schools and Classes

Day schools and classes account for the enrollment of about 40 per cent of the deaf pupils in the country.[6] The public day class programs alone serve 28 per cent of the total, with 8 per cent enrolled in public day schools and 4 per cent in denominational and private day classes. Most of the latter are relatively small and offer preschool classes only. The distinction between public day schools and day classes, as used for classification purposes in the American Annals of the Deaf, is that public day schools are those housed in an entirely separate building, while public day classes are housed in a unit not devoted entirely to the education of the deaf.

Specialized day schools for the deaf are to be found only in the larger urban centers where one might expect to find a sufficiently large concentration of deaf children to warrant the maintenance of a graded school with trained teachers of the deaf and competent supervision of the graded system. They offer a specialized education for deaf children without removing them from their families--generally regarded as a socially desirable arrangement. In some cases, however, dedicated teachers and principals are fighting not only the educational problems of deaf children, but the additional problems of urban blight and run-down buildings, as programs for physical improvement of schools by-pass the relatively small day schools for the deaf. In states where the system offers the possible alternative of the deaf child's education and maintenance in a residential school, it is not surprising that some parents find it easier and more desirable, even where public day school facilities are available near home, to send their deaf children to residential schools if they can gain admittance for them.

Large day class programs have nearly the same characteristics as day schools, and are found, in fact, as part of the same educational system for deaf children in a few of the larger metropolitan areas. For a satisfactory day class system, the population base must be large enough to include a sufficient number of deaf children to warrant the maintenance of adequate facilities. Table 3, showing teacher-grade ratios of 0.8 to 1 for public classes and 0.6 to 1 for private classes suggests that many programs fail to do so.

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[6] American Annals of the Deaf, January, 1964.

A comprehensive state plan has been devised in one state to provide day classes for deaf children through a regional day class program. These regional day class programs serve a population of approximately 500,000 and are designed to support a complete educational program for deaf children from preschool classes through high school. The school districts within each region share the total cost and are reimbursed by the state for elements of the program provided that state standards are met. Standards require that no less than six graded classes and a preschool offering are provided and that qualified teachers of the deaf are employed. Upon completion of the elementary classes, students who are unable to move into the integrated "resource room" are counseled to attend the state school for the deaf (residential), where they enter either a vocational or academic program.

The danger in the rapid growth of day classes is that classes may be established on an inadequate base, resulting in small, isolated multi-graded classes with a wide range of ages represented in each. The deaf child needs more, not less, educational attention than the hearing child, but likely will not receive it in situations where overworked or untrained teachers must cope with children of varied age and educational attainment.

Teacher Training and Qualification

Historically, the training of teachers of the deaf was the responsibility of the schools and classes for the deaf. New teachers were assigned to a master teacher for an in-service type of orientation and training. While this arrangement had benefits in terms of exposure of new teachers to the techniques of the best teachers, it tended to limit the depth and breadth of training and possibly to propagate poor techniques. Eventually, as needs increased, this in-service training took on a more formalized structure and many of the training centers began to seek college or university affiliation. The Conference of Executives of American Schools

Table 3

TEACHER-GRADE RATIO FOR
SCHOOLS AND CLASSES FOR THE DEAF--1964[a]

Schools and Classes for the Deaf	Teachers on Staff Total[b]	Number Grades Total[c]	Teacher-Grade Ratio
Public residential schools (69)	2,684	790	3.4:1
Public day classes (207)	978	1,243	0.8:1
Public Day Schools (14)	341	158	2.2:1
Denominational and private residential schools (16)	230	158	1.5:1
Denominational and private day classes (15)	73	126	0.6:1

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[a] Source of basic data: American Annals of the Deaf, January, 1964. Includes only those schools and classes where the number of grades and the number of teachers were reported.

[b] Includes only teachers and not other members of the educational staff.

[c] Includes preparatory years in addition to numbered grades.

for the Deaf expedited this movement when it required such affiliation for their certification by the Conference as approved centers for training teachers of the deaf. Advances in audiometry and techniques for the amplification of sound added substantially to the classroom presentation but necessitated a greater understanding of the nuances of various hearing losses in order to provide differentiated instruction.

Although developments would seem to call for more well-qualified personnel to staff new or expanding programs, the opposite held true; insufficient numbers of capable persons were being attracted to this critical field in spite of increased demands. To assist in alleviating this growing problem, proposals were made to Congress concerning the enactment of legislation which would provide scholarships and training grants to institutions of higher education to prepare increased numbers of teachers of the deaf. The law, P. L. 87-276, was signed in September, 1961, and was implemented the following academic year, 1962-63.[7]

The need for a uniform and accepted standard of preparation for teachers has been increasingly recognized. The standards for a certificate set forth by the Conference of Executives have been generally accepted by both those who prepare teachers of the deaf and those who employ them. Many state licensing agencies have adopted these standards and many more have incorporated them within their own certification plans. There remain, however, several hundred teachers of the deaf who are certified by neither the Conference of Executives nor by the state in which they are employed.

Requirements for candidates seeking a permanent "Class A" certification (academic) as established by the Conference of Executives are as follows: (1) at least a bachelor's degree from an accredited college or university; (2) satisfactory completion of a program of preparation as a teacher of the deaf at a training center which has been evaluated and approved by the Conference of Executives; and (3) completion of three years of successful teaching experience under qualified supervision. A temporary certificate may be granted following preparation and before the necessary experience has been completed. The following requirements must be met by the candidate for a "Class B" certification (academic): (1) at least a bachelor's degree from an accredited college or university; and (2) completion of 24 semester hours in the education of the deaf and 3 years of teaching experience with deaf children, or completion of 8 years of satisfactory teaching.

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[7] For further discussion of the federally supported teacher training program, see Chapter V.

The percentage of teachers with 4-year earned degrees varies from 71.6 per cent among the denominational and private residential schools to 99.1 per cent among the public day schools, as shown in Table 4.

Educators of the deaf have expressed great appreciation of the federally supported teacher training program. At a time of critical need, it provided trained teachers. Some school principals contend, however, that with the worst of the shortage over, admission requirements for applicants should be tightened and the training courses in some instances more closely tied to the college and university facilities, using the schools for the deaf generally only for practice teaching. While the Committee could not evaluate these views, it urges that federal officials concerned with the program do so. The Committee feels, however, that the shortage of trained teachers of the deaf is far from over and that there is a need for continuing federal support of the program.

Provision for the Multiply Handicapped

The education of the multiply handicapped deaf child is one of the major problems in the field. As modern medical care has improved, more defective children with more defects have survived the prenatal and birth trauma. There is a reasonable consensus among educators of the deaf that in cases where regular classroom work in schools and classes for the deaf is seriously impeded by the inclusion of multiply handicapped children or where the instruction is insufficiently specialized to meet the needs of the multiply handicapped child, specialized classes should be provided. This is taking place in many schools and classes for the deaf at the present time but too often on an improvised and makeshift basis.

The American Annals of the Deaf, January, 1964, issue lists 6 schools and classes for the deaf-blind serving 86 pupils, 5 for the deaf

Table 4

PERCENTAGE OF TEACHERS FOR THE DEAF WITH FOUR-YEAR EARNED DEGREES

Schools and Classes for the Deaf	No. of Schools or Classes	No. of Teachers	No. with Earned Degrees	Per Cent with Earned Degrees
Public residential schools	70	2,759	2,125	77.0
Public day classes	297	1,091	938	85.9
Public day schools	15	341	338	99.1
Denominational and private residential schools	17	233	167	71.6
Denominational and private day classes	53	182	157	86.3
Total	452	4,606	3,725	80.9[a]

Source of basic data: American Annals of the Deaf, January, 1964.

[a] Over-all percentage of teachers with earned degrees.

and mentally retarded serving 131 pupils, and 1 for the deaf and cerebral palsied, serving 5 pupils. This is clearly but a small part of this group. In reponse to the Committee's questionnaire, nearly 4,000 multiply handicapped children were reported in schools and classes for the deaf. While not all of these require special attention, many probably do. One state education official has estimated that at least 400 multiply handicapped in schools and classes for the deaf in his state should be placed in special classes.

Furthermore, not all in need of such attention are to be found in schools and classes for the deaf. A recent testing program in the schools for the mentally retarded in 1 state uncovered nearly 200 cases where the problems of retardation were further complicated by a significant degree of hearing loss.

In the study, no data were discovered which fully reveal the dimensions of the problem; yet all indications are that it is a significant and increasing one and that it warrants significant research support.

Vocational Education

Most vocational education and training programs for deaf students are to be found in the public residential schools for the deaf. The early and continuing history of most such schools has been characterized by strong vocational objectives. Yet the volume of critical literature in the journals and conferences of educators of the deaf is eloquent testimony to the fact that there is widespread dissatisfaction with the status and quality of the vocational program at present. This is not to suggest that the quality of vocational programs has deteriorated, but rather that the increasing complexity of our world of work has left the field of vocational education lagging, and not alone in programs for the deaf.

Requirements that formerly could be met by secondary or even elementary school offerings are decreasing. Vocational training and education requirements that require post-secondary school offerings are increasing. The familiar boon and bane of our society--automation--is complicating the problem of vocational education of the deaf perhaps more than that of the hearing, since the necessity of learning more to achieve a satisfactory occupational status places more of a burden on those whose difficulties with language make all learning more troublesome.

Table 5 shows the vocational offerings of the public residential schools for the deaf. It will be noted that the courses offered by the most schools are generally not employment- or trade-oriented but homemaking and hobby courses. Most of those which are employment-oriented are offered by less than half the schools.

A report on a recent investigation in the New England area concludes, among other things, that training programs now conducted by schools for the deaf in that area tend to be prevocational rather than vocational in substance.[8] With a few notable exceptions, training programs in schools for the deaf throughout the country would be generally viewed in that same light by educators of the deaf. Furthermore, many believe that this is as it should be, that the time and attention of the deaf student in secondary school should be primarily directed to the learning of foundation subjects--English, mathematics, and science--and to vocational orientation, with serious vocational education and training offered in post-secondary schools.

The views of the Committee on this subject are further developed in Chapter III.

Effectiveness of the System

There are, of course, no hard criteria or precise instruments with which to measure the effectiveness of provisions for educating the deaf in this country--to see how nearly they approach the goal of preparation to develop their talents to the limits of their capacities, to prepare them to be responsible citizens, and to offer them stimulus and opportunity for cultural enrichment of their lives. Nevertheless, certain indicators of uneven achievement in this field strongly indicate the urgency of research to discover the best and most effective ways of educating the deaf. See Chapter VI.

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[8] Occupational Status of the Young Adult Deaf of New England and the Need and Demand for a Regional Technical-Vocational Training Center, by E. B. Boatner, E. R. Stuckless, and D. F. Moores, September, 1964.

Table 5

VOCATIONS TAUGHT IN PUBLIC RESIDENTIAL SCHOOLS IN THE UNITED STATES

Vocations Taught	Number of Schools Offering Each
Agriculture	3
Commercial	47
Home Crafts	
Clothing and Related Arts	60
Foods and Related Science	60
Semiprofessions	
Barbering	10
Commercial Art	10
Cosmetology	20
Drafting	23
Library Management	5
Photography	15
Trades and Industries	
Automobile Driver Training	26
Auto Mechanics	10
Baking	17
Cleaning and Pressing	18
Dressmaking	43
Electrical Servicing	3
Graphic Arts	46
Ironing	21
Laundering	21
Leatherwork	29
Masonry	4
Metalwork	17
Painting and Decorating	13
Photoengraving	1
Power Machine Operation	26
Sign Painting and Lettering	3
Tailoring	8
Upholstering	27
Woodworking	61
Miscellaneous	
Office Machines	3
Shoe Repairing	6

Source of basic data: American Annals of the Deaf, January, 1964.

One of the few available measures of educational attainment of deaf children is the Stanford Achievement Test--a test widely, although not universally, administered to the children in schools and classes for the deaf. During the study, data were requested on the achievement test scores of all children who left schools and classes for the deaf during or at the end of the school year 1963-64. While the results were not submitted in all cases, a substantial cross section is available. An analysis of the scores is presented in Charts I and II.

Chart I shows the range and median, by age, of academic achievement on the Stanford Achievement Test taken by some 920 students who left public residential schools during or at the end of the 1963-64 school year.[9] At no age was the median grade average as high as the seventh grade despite the fact that the bulk of those included were at least of high school leaving age. As might be expected, the highest points reached were for the group aged 16 through 19, representing the performance of the better students who were able to complete the course earlier than the others.

Chart II shows the same information for the 365 students in the group who received academic diplomas. This reveals even more clearly the superior performance of the younger graduates, but there can be no complacency in the fact that the median achievement level ranges from something less than seventh grade to something less than ninth grade.

The system of education of the deaf leaves a substantial gap between the attainments of deaf children when their secondary school education ends and those of hearing children generally. Some of the reasons why the learning process is so much more difficult for deaf children than for those with normal hearing have been discussed earlier. The disparity of achievement, however, should not be calmly accepted with the conclusion that nothing can be done about it.

Achievements in different schools, under different programs, with different teaching methods should be compared to discover, if possible, why

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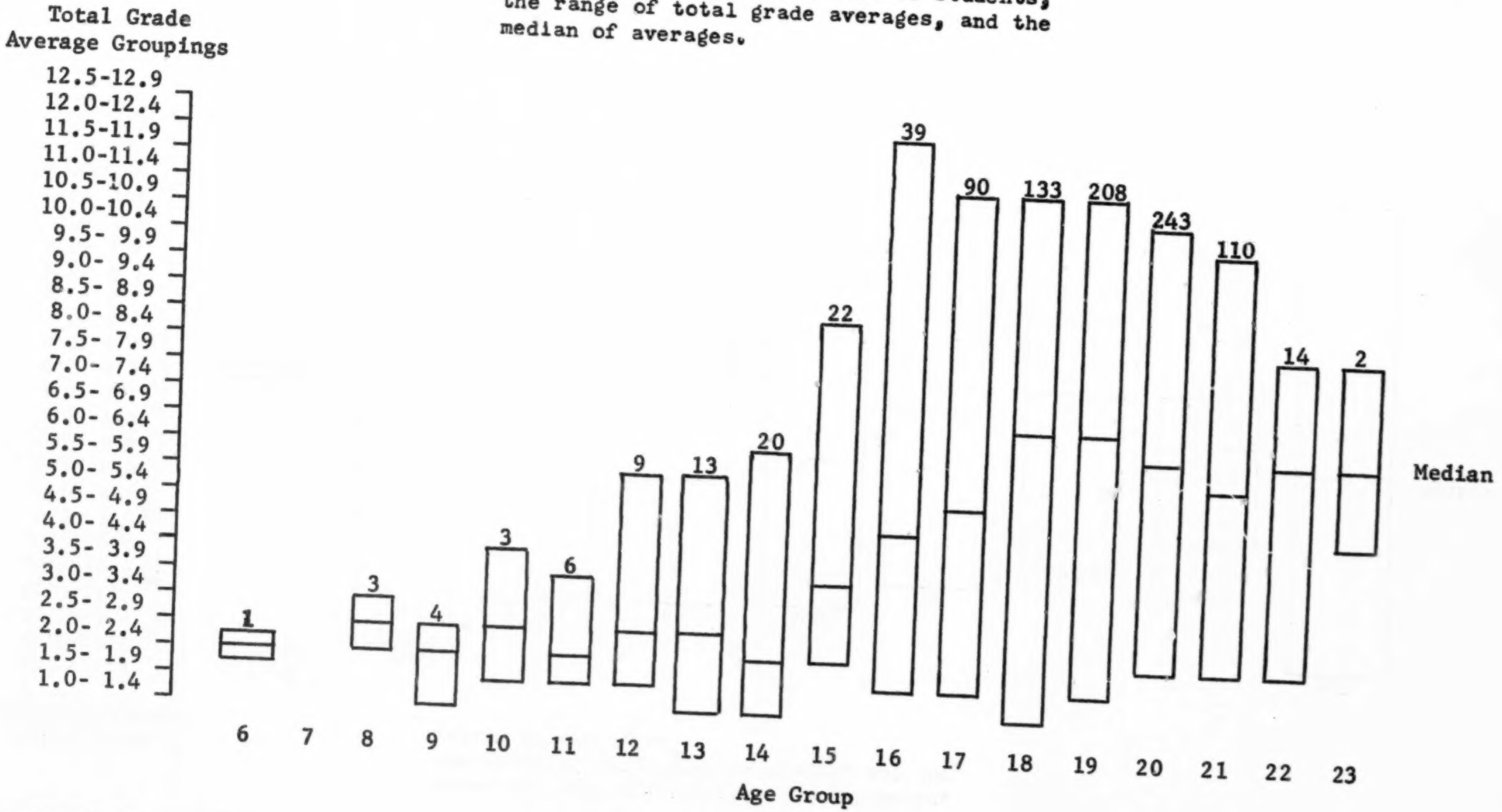
[9] Returns from public day schools and classes were fragmentary and inconclusive. Most reported that records were no longer available at the reporting schools, having followed the students to other schools.

Chart I

GRADE AVERAGES BY AGE OF 920 STUDENTS[a] LEAVING REPORTING PUBLIC RESIDENTIAL SCHOOLS 1963-64 SCHOOL YEAR

Shows for each age the number of students, the range of total grade averages, and the median of averages.



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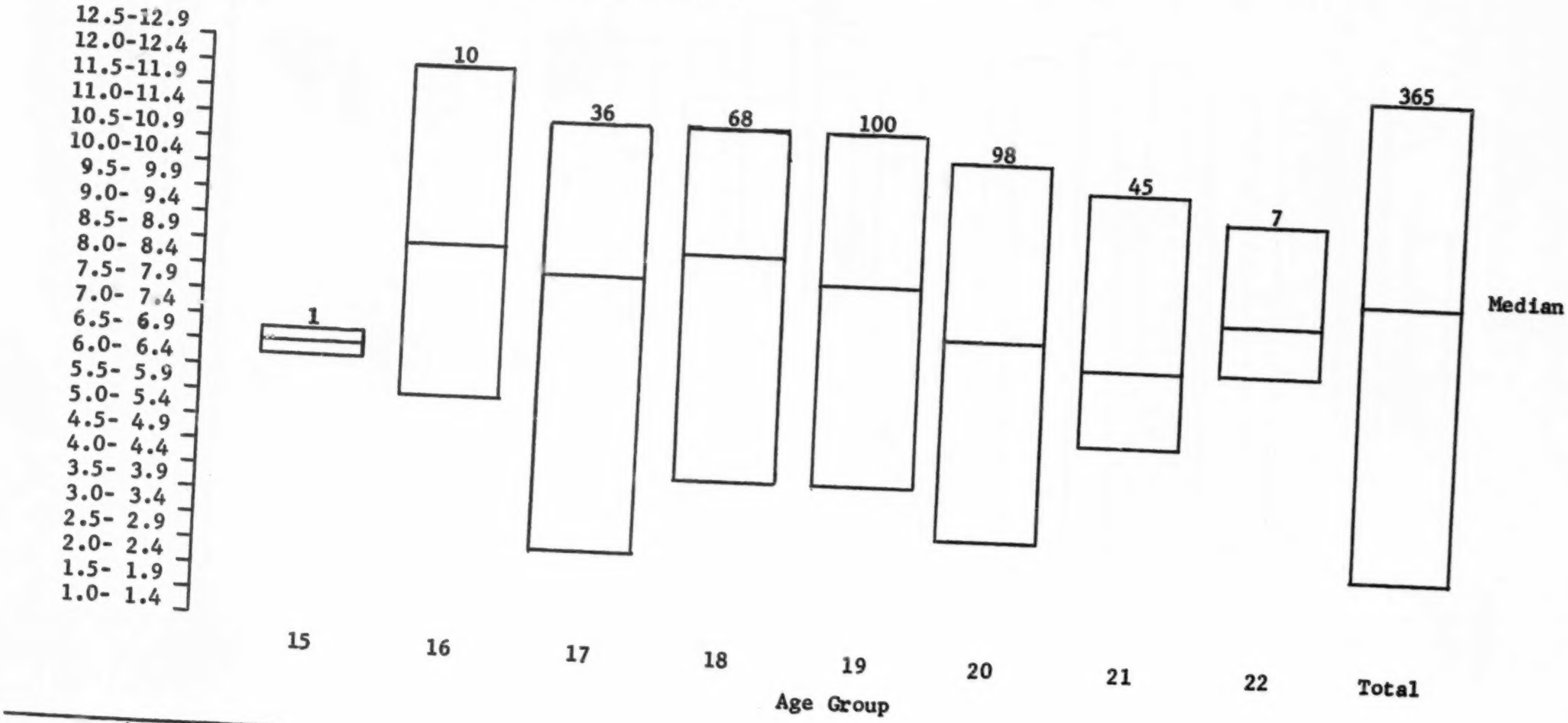
[a] Includes only students where Stanford total grade average and age was reported for each student.

Chart II

GRADE AVERAGES BY AGE OF 365 STUDENTS[a] RECEIVING ACADEMIC DIPLOMAS FROM REPORTING RESIDENTIAL PUBLIC SCHOOLS AT END OF THE 1963-64 SCHOOL YEAR

Shows for each age the number of students, the range of total grade averages, and the median of averages.



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[a] Includes only students where Stanford total grade average and age was reported.

in one school for the deaf the median achievement test score (grade average) of those who left school was 3.0 while in another it was 8.2--or even why, with a fairly large comparable number of students leaving two schools in the same state, the median grade average at one should be 4.3 and at another 5.6 among students in roughly the same age brackets. This is not to suggest that in each case of difference a superior educational method is responsible, or even that from each such analysis we can discover useful guides to better teaching. It may be suggested, however, that the careful examination of the educational experience of the deaf, using retrospective and longitudinal research approaches, should help to identify the more successful programs and to share the benefits of the elements of such programs.

Another indicator of the degree of success of the system is the occupational success of deaf students in later life. Probably the most extensive analysis throwing light on this question is found in Occupational Conditions Among the Deaf by Anders S. Lunde and Stanley K. Bigman, a 1959 report on a national survey conducted by Gallaudet College and the National Association of the Deaf. Table 6, derived from the results of that survey, shows more than twice the percentage of deaf persons in groups IV and V--craftsmen, foremen, etc., and operatives, etc.--than is the case with the general U. S. population. It will also be noted that among the deaf, 17.0 per cent are in white collar jobs (groups I, II, and III) and 83.0 per cent in manual jobs (groups IV through VII), while in the total population the comparable figures are 46.8 per cent and 53.2 per cent, respectively. The authors of the report suggest a probable bias in the deaf sample which would, if it were possible to correct it, make the disparity even greater, since the lower-paid deaf workers are probably underrepresented.

The recent investigation by Boatner, Stuckless, and Moores of the occupational status of the young adult deaf in New England cited earlier concludes that they are employed considerably below their basic aptitudes.

Table 6

OCCUPATIONAL GROUP OF EMPLOYED DEAF RESPONDENTS AND EMPLOYED POPULATION OF THE UNITED STATES

January, 1957

	Occupational Group	Employed Persons Among	
		Per Cent of Deaf Respondents	Per Cent of U. S. Population[a]
I	Professional, technical, etc.	6.6	10.6
II	Managers, officials, etc.	3.2	15.5
III	Clerical, sales, etc.	7.2	20.7
IV	Craftsmen, foremen, etc.	35.9	13.4
V	Operatives, etc.	35.2	20.1
VI	Service workers	6.2	11.7
VII	Laborers	2.6	8.0
	Not reported	3.1	--
	Total	100.0	100.0

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[a] Source: U. S. Bureau of the Census, Current Population Reports: Labor Force, Series P-57, No. 175 (February, 1957), Table 15, p. 12, as reported in Lunde and Bigman, *supra*.

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The same conclusions may be readily drawn from a number of other studies.[10/] The generally accepted view is that the language and communication difficulties of the deaf are responsible for this waste of potential skills and abilities.

Identification of Needs for Improvement

The programs of education for the deaf, by and large, are not succeeding. The test performance of deaf students at all grade levels is disappointingly low. Despite sincere and determined efforts by students and teachers alike, the achievement of most deaf students remains markedly inferior to that of hearing students. A thoroughgoing effort is required to achieve a better understanding of this particular educational problem and to develop useful knowledge of effective ways to cope with it.

A Systematic Program

The basic requirement for the improvement of the education of the deaf is the development of a more systematic approach to attacking the known deficiencies. While it is not practicable to meet all of the educational needs of deaf children on a state-by-state basis, the basic core structure of the system should be the responsibility of the states, as is the case with public education generally. The Federal Government should support research, such specialized facilities as are not feasible on a state basis, and such needed specialized services as are not feasible for the states to undertake (for example, the support of teacher training). Interstate cooperative arrangements, both bilateral and regional, should be explored fully to meet the needs in states where it is not economically feasible to support a full array of required facilities and services.

[10/] See, for example, Dunn, J. H., Report of Special Project to Study Wisconsin's Rehabilitation Problems Associated with Deafness. Wisconsin State Board of Vocational and Adult Education, 1957; Rosenstein, J. and Lerman, A., Vocational Status and Adjustment of Deaf Women. Lexington School for the Deaf Research Series, 1963, No. 1; and Justman, J. and Moskowitz, S., A Follow-up Study of Graduates of the School for the Deaf. Pub. No. 215, Office of Research and Evaluation, Board of Education of the City of New York, 1963.

Within each state there needs to be a central focal point of responsibility for and concern with the education of the deaf and the availability of closely related public services (case finding, diagnosis and evaluation, treatment, etc.). From that focal point can be structured a constructive and harmonious relationship among the several elements of the system--residential schools and day schools and classes (both public and private), diagnostic centers, teacher standards and certification, home teaching and parent counseling services, audiologic services, and so on. It is important that, whether the problems and resources of a state in this field are many or few, there be potential provision to meet the educational needs of every deaf child and a central point of responsibility for the system at the state level which can identify and refer to the necessary resources.

Early Identification of Deaf Children

Hearing defects in young children need to be discovered promptly so that they may be remedied if possible or, if remedy is not possible, so that the special educational process can be initiated at an early age when a hearing deficiency seems to be the continuing lot of the child.

Evaluation and Continuing Assessment

Early identification serves chiefly to signal the need to bring into play the multidisciplinary diagnostic and evaluative services required for a thorough assessment of the cause and nature of the hearing loss. While such services exist in the country, they need to be made more effectively available and to be employed on a continuing basis to detect significant improvement or deterioration.

Language Teaching

There is widespread agreement among educators of the deaf that one of the outstanding needs in the field is for the development of processes and methods to enable the young deaf child to comprehend and use language with facility. Many of the frustrations and criticisms which occasioned this study can be attributed to the identification of deficiencies in the level of educational attainment of the deaf at the college level, which in turn, can be traced back through the secondary, elementary, and preschool programs; the root difficulty being our inadequate knowledge of the language-learning processes. While the problem is not peculiar to the deaf, it is particularly acute with them, and any substantial improvement in the education of the deaf generally is likely to depend upon advances brought about by well-supported and competently conducted research in this field.

Teacher Training

A few possible needs for improvement in the field of training teachers of the deaf have been suggested earlier. There is a definite need for the effective utilization of the federally-supported program under P. L. 88-164 to develop supervising teachers of the deaf and preschool teachers especially equipped to serve as home teachers and parent counselors, as well as to continue to train more and better equipped teachers.

Parent Education and Guidance

There is a need to make more effectively available to parents of deaf children the advice, counsel, and education over a long period of time that is so desperately needed not only when they are confronted for the first time with the problem of bringing up a deaf child, but also throughout the deaf child's period of dependency on them.

Improved Community Understanding

All feasible means should be employed to improve public understanding that the handicap of deafness is a handicap in communication only, that otherwise the innate abilities of the deaf are no different from those of the general population, and that opportunities to develop those abilities should be generously offered.

High School Program

Except for the minority of deaf students who are able to progress satisfactorily in integrated classes with the hearing, few deaf students have the opportunity to complete a high school course comparable to that available to young people generally. The deaf should have an opportunity to earn a meaningful high school diploma.

Relationship to Other Programs

There has been in recent years a growing appreciation of and support for programs of special education. The education of the deaf appears to have been included by definition, but actually to have been separated in most states from the mainstream of such educational developments. The deaf child benefits from the array of diagnostic, research, and other specialized services that have been developed to serve the needs of all children in need of special educational services. Education of the deaf therefore should be pursued as a real and important part of the total special education programs in the states.

Racial Integration in the Education of the Deaf

In 1949, according to the American Annals of the Deaf, separate residential schools were maintained for white and Negro deaf children in 13 states; in 1963, this total had dropped to 8. In 6 of these 8 states, the combined total of deaf children enrolled is less than most educators of the deaf consider necessary to sustain a school program of 12 grades. It is thus reasonable to conclude that the continuing violation of a generally accepted principle and established public policy results not only in an injustice to the Negro deaf but also in residential school programs for both white and Negro deaf children that are unnecessarily inferior. It was noted that the physical plants of the schools for the Negro deaf visited were markedly inferior to those of the schools for white children.

The principle of equal educational opportunity for all, without regard to race, color, creed or national origin, is clearly nowhere more applicable than in programs of education for the handicapped.

Recommendations

In order to meet the urgent needs cited above, and to bring about a general improvement in the preschool, elementary, and secondary education of the deaf, it is recommended:

1. That the Congress of the United States be requested to authorize the appropriation of funds for a program of planning grants to the states, similar to the program of mental retardation planning grants, to be used to assist and encourage the states to develop individual state plans for the education of the deaf. A part of the funds thus appropriated should be reserved to the Commissioner of Education to facilitate regional and interstate planning.

2. That the Commissioner of Education convene a national conference of federal, state, and local governmental and professional leadership to consider the most effective ways to encourage the development of state plans for the organization of educational and auxiliary services for the deaf; and that the agenda for such conference include consideration of the following points, among others:

    a. That such plans contemplate taking full advantage of the potential of other kinds of special education programs.

    b. That the plans thus developed cover provision for all of the essential elements of a system for the education of the deaf set forth at the beginning of this chapter.

    c. That the plans contemplate placement of leadership responsibility for the program of the education of the deaf in the department of state government having responsibility for general public education within the state.

    d. That the plans include suggested interstate arrangements for the utilization and support of essential specialized elements of the system which it may prove infeasible for a single state to support adequately unaided. (Precedents for such arrangements may be found in various regional interstate agreements in the field of general education and in the common practice in the northeastern states in the education of the deaf.)

    e. That the suggested plans, when completed, be widely publicized and distributed among the states, and that the states be encouraged and assisted to develop detailed plans and programs suited to their particular needs.

II. FACTORS IN THE SELECTION OF TYPES OF EDUCATIONAL PROGRAMS FOR DEAF PERSONS

Four types of organized educational programs for the deaf are offered in the school systems of the country: residential schools, day schools, day class programs, and classes for hearing children into which deaf children are integrated, usually with the provision of a resource teacher who is available to assist the deaf child as difficulties arise. Other programs also play an important part in the education of the deaf child, including home programs for teaching speech to very young deaf children; a few specialized programs for the child with two or more handicaps, one of which is deafness; and a number of centers, both public and private, which offer diagnostic services or speech training. For the purposes of this chapter, however, the discussion is concerned with those resources of subject matter education which can be said to be a part of an educational system.

Many factors deserve consideration in the selection of one of the several types of programs, some obvious, some not so obvious--and some about which present knowledge is insufficiently advanced to justify unequivocal conclusions. The following discussion deals with the advantages and disadvantages of each of the kinds of programs.

Residential Schools

The first organized programs in this country were started in residential schools. These have remained the main resource for over a century, despite recent more rapid growth in the other programs. A statement of the advantages and disadvantages of such programs will not meet with unanimous agreement, but the following points are consistent with the objectives set forth in the introduction to this report.

Advantages

1. The residential schools offer the most satisfactory solution to the geographical problem--that of offering an organized educational program to deaf children whose homes are in rural areas or in communities too small to support a specialized program.

2. From the standpoint of organization and administration, residential schools enjoy the advantage of having reasonably full responsibility for direction fixed in a superintendent or headmaster, who by virtue of his position is concerned solely with the objective of educating deaf children.

3. The residential schools permit a sufficiently large number of deaf children to be brought together to justify the acquisition of specialized auditory examination and training facilities and equipment. It must be conceded that this factor is not a completely consistent one. Twenty-one out of a total of 87 public and private residential schools have enrollments of less than 100, while 9 of 15 public day schools and 15 of 297 day class systems have enrollments of more than 100. Nonetheless, residential schools do generally have larger enrollments.

4. The larger average size of residential schools also makes feasible a larger and more diversified faculty and the consequent offering of a wider range of subjects taught.

5. A residential school provides an "around-the-clock" school environment for dealing with language-learning and related problems of deaf children.

6. Surrounded as he is by deaf companions, the deaf child can lead a less strained life in out-of-school hours. (Some will dispute that this is an advantage, contending that it may encourage at an early age the segregation of the deaf in our society.)

7. For many deaf children from economically disadvantaged families, the residential school offers better physical surroundings, better nutrition, and an environment more conducive to after-school study than would be provided at home.

Disadvantages

1. The deaf child in a residential school is necessarily removed from the many daily attentions of his family--family affection and interest and the "give and take" of family life--which our society generally prizes.[1/]

2. The child is in most cases isolated to a considerable degree from the kind of life and society to which he will have to adjust on emerging from the residential setting.

3. Even though the program of the school attempts to counteract this isolating tendency by facilitating contacts with the surrounding community, too many residential schools are located in very small communities. Our country is experiencing a rapid trend to urbanization, and the adult deaf in particular generally prefer to congregate in urban centers, but residential schools generally do not prepare students adequately for urban living.

4. Many factors in residential schools operate to encourage the segregation of the deaf in our society. The children do not have opportunities to play and associate fully with hearing children or the challenge of finding ways to communicate effectively with them. The reliance on manual methods of communication at least outside of the classroom in the majority of such schools tends to fix a habit of such relatively easy communication for social purposes and thus to dull the motivation to surmount the more difficult obstacles to oral communication. (Some will point out, on the other hand, that many deaf children who are psychologically and socially handicapped as well suffer a greater degree of isolation in a hearing environment at home and that it is only in a segregated setting that they find the social satisfaction of communicating with their peers.)

5. Most residential schools provide less opportunity for the movement of deaf students on an individual basis to other systems than do day schools and day class programs. The latter more often seek to prepare students to be integrated

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[1/] A few residential schools in densely populated areas recognize and counteract this to a degree by requiring that the children return to their families on weekends. Others permit it where possible.

into classes of hearing children and to effect such transfers on an individual basis when the child is considered ready. In residential schools, the objective is more likely to be the completion of the residential school program.[2]

6. As with any institution--educational or otherwise--in which teen-aged boys and girls are housed, problems of adolescence and sexual maturing arise and must be handled by school personnel in a nonfamily environment. Such problems might be more constructively prepared for and handled in the more normal environment of home, church, and day school.

Day Schools for the Deaf

Fifteen day schools for the deaf located in nine states operate as parts of the public school systems of the cities or school districts in which they are located. All use only oral methods of instruction. Only one of them offers 12 grades of instruction, most of them seeking the progression of students to either special classes for the deaf or integrated classes at either the junior high school or the high school level.

The establishment of a day school is generally controlled by population considerations since it must serve an area in which there are enough deaf children to justify a specialized school with graded classes, trained teachers, and adequate teacher supervision.

Advantages

1. The day school for the deaf permits the special instructional needs of the deaf child to be met without separating him from his family.

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[2] Here again, others will see this as an advantage rather than a disadvantage, contending that the uprooting of the deaf child from a setting in which his progress makes him stand out and placing him in a setting where his achievement is likely to be below average is a psychological and social shock which may be harmful to his development.

It should be noted also that several residential schools--those which are purely "oral" in approach--have as their objective the preparation of all students for transfer to hearing classes at either the junior high school or the high school level.

2. Day schools are, virtually by definition, located in large urban areas and thus offer to the children the advantages of growing up in the familiar environment in which most of them will spend their lives and of becoming familiar with urban institutions.

3. Day schools permit deaf children to enjoy as much of a normal growing-up environment as their personalities and inclinations seek. After-school play and associations are likely to involve hearing children to a degree that will make easier the deaf child's active participation in society in later years. (Some contend, however, that it is the exceptional deaf child who is able to enjoy a full and satisfying relationship with hearing companions and that the lot of most individual deaf children in groups of hearing children is one largely of isolation and frustration.)

4. Like residential schools, day schools are generally large enough to justify specialized equipment helpful in the education of the deaf, as well as the employment of trained teachers of the deaf with adequate subject matter specialties.

5. Day schools enjoy an advantage over day class programs for the deaf in that each day school has a principal whose administrative and educational concern is focused on the instruction of deaf children.

6. Because the school is located in districts where the students live, it is possible to involve the children's parents more deeply and directly in the children's educational problems and progress than is the case generally with residential schools.

7. There are easier opportunities than are found in residential schools to move the more advanced students to integrated classes with hearing children when they are considered ready. (But see footnote, page 34 for the contra argument.)

Disadvantages

1. The day school cannot control the out-of-class environment of the students to meet the extraordinary language-learning needs of deaf children. (Some will contend, however, that the natural curiosity of the children can be so stimulated in school and nourished at home that language-learning achievement is superior to that of children in residential schools.)

2. In some cases, residential schools are able to be more selective in intake, with the result that day schools must take more of the lower achievers, the emotionally disturbed, and the multiply handicapped. In such cases, unless it is feasible to organize special classes, all suffer--the slower students, the teachers, and the "normal" deaf students. (This is a problem in nearly all schools and classes for the deaf to a greater or lesser degree. In some day schools, however, the problem is particularly acute.)

3. The day schools do not enjoy the same degree of identity in the educational system that residential schools do. The day school for the deaf must compete with many other schools for the time and attention of officials of the school system.

Day Class Programs for the Deaf

The number of day class programs for the deaf in this country has more than doubled in the past 15 years. Such programs are organized and housed within the same school buildings as accommodate hearing children. In cases where there are many graded classes taught by trained teachers of the deaf under qualified supervisors, a day class program can be more like than unlike a day school for the deaf. Much of the day class growth, however, except in the large urban centers, has been in the establishment of classes to serve a relatively small number of deaf students in a wide age range. This has led many educators of the deaf to view with alarm what they refer to as a "return to the little red schoolhouse" in education of the deaf.[3/] In such cases, the educational needs of deaf children are obviously not being served nearly as well as in either residential schools or day schools.

[3/] While there is reason to believe that the information is not in all cases complete or fully descriptive of the programs, the listing of day classes for the deaf in the American Annals of the Deaf, January, 1964, shows 142 schools having graded class systems with fewer than 20 deaf students enrolled. Of these, 83 supplied information on the number of grades offered and the number of teachers assigned. Grades offered ranged from 1 to 12 and teachers assigned from 1 to 6. In only four cases did the number of teachers equal or exceed the number of grades covered. Nearly half of the schools in the group (35) reported 6 grades offered, and half of these (17) reported only 2 teachers covering the 6 grades. Seventy-one reported teachers covering 2 or more grades, and 39 reported only 1 teacher who was responsible for from 3 to 12 grades.

Most advantages and disadvantages cited above for day schools are equally applicable to those day class systems with distinct graded classes having at least one teacher each. In addition, the following are peculiar to day class programs:

Advantages

1. The point is made by some that day classes offer opportunities superior to day schools for structured relationship between deaf children and hearing children. While classroom instruction is segregated to permit specialized attention to the educational needs of deaf children, other school activities and facilities are integrated. Others contend that the advantage is more apparent than real, since on the playground and in the lunchroom there seems to be an invisible wall between most deaf and hearing children.

2. There is even greater opportunity than in the case of day schools to place students who make rapid progress in integrated classes with hearing students, since it is often possible to arrange trial transfers for one or two classes a day. In such cases, the break is not as complete.

Disadvantages

1. The day classes are organized within schools for hearing children, and the deaf children constitute a distinct minority in such schools. The problems confronting the principal of such a school are likely to be predominantly those concerning the hearing students and their program, and the time and attention devoted to the operation of the classes for the deaf may be minimal. It is essential that the education of the deaf be more closely supervised than that of the hearing because of the additional learning problems involved. This particular disadvantage may be overcome by special provision for such supervision within the individual school.

2. There is one additional potential difficulty in the larger day class systems where several schools have classes for the deaf and special provision is made in the central office of the system for supervision

> of such classes. This inevitably involves dual lines of supervision to the classes for the deaf, one from the central unit concerned with the education of the deaf and the other from the principal of the school. In many cases--probably most cases--this presents no serious difficulty, but it is always a potential source of trouble, since individual interests and personalities are involved. In the case of day schools for the deaf, this danger is avoided.

Integrated Classes with the Hearing

Integrated classes with hearing students do not constitute the same kind of alternative program for the education of deaf children as do the residential schools, day schools, and day class programs. In order to succeed in integrated classes, deaf children must have received in one way or another intensive, specialized instruction in speech and speechreading. Integrated classes are therefore a progressive step in the education of the deaf, and the advantages and disadvantages are not listed in the same form as for the other types of programs.

With the present state of our knowledge of and provision for the education of the deaf, we may expect only a minority of deaf children to have a good chance of educational success in integrated classes, even with facilitative services and help. The lower achievement levels of most deaf students attributable to their early and continuing language and reading difficulties pose insurmountable obstacles for most of them in integrated classes.

For the substantial minority who are able to register satisfactory achievement, however, and to whom such placement does not create serious psychological and social difficulties, placement in integrated classes is eminently to be desired. It serves to keep more fully open to them the choices in later life which are important to deaf adults and is likely to enhance their further educational opportunities. To increase the likelihood of success in such a setting, special counseling and help is normally made available to deaf students in integrated classes as long as it is needed.

Difficulties in Relating Programs to Types of Deaf Persons

It would be convenient if it were possible to develop neat categories of deaf persons by type and to suggest the development of individual types of educational programs for each. The basic fact, however, is that each deaf person is an individual endowed with a complex of talents and limitations, just as is the case with hearing people. There are wide ranges of native intelligence, personality characteristics, aspirations, physical abilities in other respects than hearing, talents, skills, and aptitudes, including those for language learning. To these differences that characterize the general population must be added such differences among the deaf as the degree of hearing loss, the site of the lesion, and the age of onset of hearing loss.

All of these differences interact on each other in ways that defeat attempts to develop an orderly classification for purposes of such vital decisions as those involving types of educational programs. While certain groupings can and must be tentatively attempted, the system must never be allowed to obscure the basic concern with the individual deaf child or to lessen in any way the importance of being alert to desirable modifications in the program planned for him.

With these strictures kept prominently in mind, it is possible to discuss kinds of programs that may be suitable for deaf children.

At the outset, it must be recognized that there are some deaf children whom it will not be possible to educate in the generally accepted meaning of the term, just as is the case with some hearing children. The most seriously mentally retarded children who have the additional handicap of deafness should be given such training as they are capable of receiving in specialized classes for the deaf retarded. In such cases, the mental retardation should be considered the primary handicap, and the program should be the responsibility of those providing training programs for retarded children, with specialized teaching developed for the deaf child. A real danger should be recognized here, however--the possibility that educational retardation caused by deafness may be mistaken for mental retardation. Careful and repeated diagnoses and evaluations should be conducted to minimize the likelihood of such confusion.

Early and repeated diagnosis and evaluation should, in fact, be conducted in all cases of suspected deafness. Every possible advantage should be taken of advances in techniques of auditory training or of possibilities of surgical or other corrective measures. When it appears, however, that a child has an apparently uncorrectible hearing loss of sufficient severity to constitute a severe obstacle to the learning of language, special instruction should be provided as discussed in Chapter I. With rare exceptions, such instruction should be given in programs that permit the child to live at home at least until he is three to four years of age. If an adequate program is available, it will be in most cases desirable for him to maintain a regular presence and close identification with his family for several more years; but these are the most critical years for the young deaf child in the learning of language, and if circumstances are such that an adequate educational program cannot be offered in a setting that permits him to live at home, the parents should be urged to cooperate in such a program at a residential school.

For children who are profoundly deaf, whose deafness occurred at birth or before language patterns were established, specialized educational programs are indicated. If these can be offered in a day school or day class setting, there are some familial and social advantages to be realized in such a program. However, individual circumstances in such cases should be controlling, and it may well be that psychological or social factors (the home environment, for example) would indicate that a residential school program would be preferable.

If such a child makes satisfactory progress in oral communication, there would be both individual and social advantages in striving to transfer him when ready to an integrated class with hearing children, preferably under circumstances that would permit return to specialized programs without the harmful experience of a sense of failure.

If, after repeated attempts with a good oral program, it becomes clear that a child is not making satisfactory progress, there should be no hesitation in turning to manual communication methods. The key phrase here is "after repeated attempts." The change to a "manual track" in the school program generally preempts a decision which it is normally desirable to leave to the individual when he becomes an adult: whether avenues of communication with the hearing world are to be severely restricted.

In every case, however, important individual differences must be taken into account. If a child for whom a residential school program is indicated is unduly emotionally upset at the prospect of separation from his family, it may be that the consequences of such an emotional wrench could be far more harmful to his educational progress than an otherwise less satisfactory program.

In summary, the generalizations above should always give way to considerations of what is best for the individual, to the extent that "what is best" can be perceived.

Conclusion

The Committee concludes that there is a place for the residential school, the day school, the day class program, and the integrated class with hearing students in a comprehensive program of education for the deaf. The skills and insights required to make the best use of alternatives in individual cases cannot be imparted by formula. Such decisions should be the product of the best interdisciplinary talents that can be summoned for careful diagnosis and evaluation on a continuing basis. In all types of programs there should be constant striving for improvement in quality and an eager receptivity to research findings which offer hope of more effective educational techniques. (See Chapter VI.)

III. POST-HIGH SCHOOL PROGRAMS

The post-high school educational opportunities for young deaf people are extremely limited. Few emerge from their secondary education with speech and speechreading skills adequate to permit them to succeed without special help in an institution for the hearing.

Present Status

Liberal Arts

Gallaudet College is the only four-year liberal arts college for the deaf in the country.[1] For the deaf student who emerges from secondary school with major reliance on manual communication, it offers the only hope for a college degree of bachelor of arts or bachelor of science. Moreover, as admission and performance standards are raised for students in colleges for the hearing, more deaf and very hard-of-hearing students who with some difficulty would have been able in the past to earn such degrees in hearing colleges are also turning to Gallaudet College. In 1959, 116 students entered either the preparatory year or the freshman class. Of these, 21 or 18 per cent came directly from schools other than public residential schools. (While not all public residential schools employ the manual method of communication, very few of the day schools and classes do.) In 1964, 246 students entered the preparatory year or the freshman class, of whom 72, or 29 per cent, came directly from schools other than public residential schools. The proportionate increase from these sources is thus over 60 per cent.

Comprehensive source material on deaf students who attend hearing colleges is meager; they become statistically "lost" as they are commingled with hearing students. A survey, reported in the September, 1963, issue of the Volta Review, indicates that not more than 19 students who graduated from secondary schools with hearing students in the preceding year were attending colleges where they might be taking liberal arts courses. It is of course unlikely that the survey achieved complete coverage, but it is a fair conclusion that far more deaf students currently pursuing a liberal arts course in college are attending Gallaudet College than all other colleges combined.

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[1] Gallaudet College is discussed at greater length in Chapter IV.

Professional Education and Training

The opportunities for professional education and training are indeed limited for the deaf student. Aside from the graduate course in education at Gallaudet College leading to the degree of Master of Science in Education, there is no known professional offering in American colleges and universities available to deaf students unless they have better than average skills in speech and speechreading. Available information indicates that relatively few deaf persons pursue their education along professional lines except to become teachers.

A survey whose results were published in 1959 showed a total of 528 "professional, technical, and similar workers" among 7,920 respondents.[2] More than half of these (304) were teachers, athletic coaches, or school counselors. Of the remaining 224, the largest groups were to be found in technical occupations (59 drafstmen and cartographers, 21 photographers, 24 technical engineers, 28 natural scientists, 30 technicians--medical, dental, and other, etc.). The rather extensive sample revealed only one lawyer, two social workers, three journalists, and eight clergymen. Even this probably gives an inflated impression of the professional proportion of the deaf, as the authors themselves suggest that the less well-off-economically were probably significantly under-represented in the sample.

On the assumption that the pursuit of advanced degrees does relate to professional education, however, it may be worthwhile to note that some deaf persons do succeed in hearing colleges in earning such degrees. The 162 deaf respondents in a study in progress at the University of Illinois included 25 who had earned their Master's degrees in hearing colleges, as well as 6 with earned doctorates. But with between 1,200 and 1,500 students over 16 leaving schools and classes for the deaf each year, this represents a very small cumulative total who pursue professional studies to the point of a career.

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[2] Lunde and Bigman, op. cit.

Vocational Education

Vocational education and training in the traditional secondary-school sense has been more available to deaf students in the past, although here again there is little specialized opportunity at the post-secondary level. Perhaps the greatest success to which specialized schools for the deaf have been able to point is in the vocational education area. Nearly all such schools have offered vocational courses superior to most other schools, and a few schools have offered and continue to offer outstanding programs.[3]

The basic problem is that the requirements of vocational education in general have been dramatically increased in recent years by technological advances. The job requirements in many lines of work that could formerly be met by a good trade or technical training program at the secondary school level now call for a much broader-based foundation in English, mathematics, and science before the technical training requirement can be met. Also, more and more vocational education and training courses must be provided at the post-secondary level to meet changing employment requirements. Recognition of these needs in the whole field of vocational education is evidenced by the provisions of the Vocational Education Act of 1963 and by a growing number of thoughtful studies, analyses, and comments.[4]

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[3] For a more detailed discussion, see Chapter I.

[4] See "Vocational Education: In the High School?" in the Saturday Review, August 15, 1964, an editorial which concludes that the needed expansion of technical training should take place not in high school but in junior colleges, adult evening schools, post-high school technical schools, and programs conducted by industry. For a comprehensive current study, see Man, Education, and Work: Postsecondary Vocational and Technical Education, by Grant Venn. June, 1964, 184 pp. Published by the American Council on Education, Washington, D. C.

For the deaf student there is little specialized opportunity for post-secondary vocational education and training which is characterized by recognition of and compensation for the nature of his handicap. A notable exception is to be found in the program for the deaf at Riverside City College in Riverside, California.

Riverside City College is a two-year junior college in which a special program for the deaf was inaugurated in the fall of 1961. The students were provided special assistance in the form of hearing-student tutors, instructors' notes, and interpretation in the classroom in the language of signs by trained instructors of the deaf. A house provided by the college was used as a Center for the Deaf. Summer courses in English and mathematics were provided to meet the students' needs for additional instruction in these subjects.

The program has been the subject of continuing evaluation. Some of the findings reported by those in charge of the program are:

1. More rigid entrance screening was required to reduce the dropout rate. (Of 41 students who have entered the program, 3 completed their requirements for the Associate in Arts degree, 1 the vocational nursing program, 1 the cosmetology course, and 13 were still enrolled in early 1964. The other 23 had left for a variety of reasons.)

2. The more verbally oriented classes (English and history) required a retreat from the attempted integration with hearing students to separate classes for the deaf.

3. The special program is best suited to students who have a profound hearing loss. Students with minimal hearing losses accepted in the special program did not integrate well with either the deaf students or the hearing students.

For the deaf student seeking post-secondary vocational education in other areas of the country, no such specialized program has come to the Committee's attention. Occasionally a residential school for the deaf is able to accommodate one or two postgraduate students, but there is no systematic program for them. The information received from schools and classes for the deaf shows that many students who leave, either as graduates or as having attained the maximum age of eligibility for school attendance (commonly but not uniformly 21 years), go on to regular business, trade, and technical schools for the hearing, often with the assistance of the state department of vocational rehabilitation. Unfortunately, this study was not able to include information on the degree of success or lack of success that attended their efforts there. It is likely, however, that the training received in many such schools is assimilated with somewhat less difficulty than is a liberal arts education in a hearing college, since more of the instruction can be expected to be by demonstration and less by verbal communication.

Adult Education

The growth in adult education programs in America in recent years has not included sufficient programs for the adult deaf. The fact that most adult deaf communicate principally by the language of signs has probably discouraged any significant steps in this direction. A few attempts to initiate such courses have been enthusiastically received by the deaf themselves, but have failed to gain continuing support within the school system.

Needs for Improvement

Aside from the offerings at Gallaudet College and a few isolated programs in other fields, the only post-secondary educational opportunities for the deaf in this country are those which are available to the hearing population--and they are available only as offered to hearing students, without special facilities that recognize the handicap of deafness. Hearing colleges and schools are attended successfully by a few deaf individuals with exceptional qualities. It is clear, however, that without a dramatic improvement in language learning and a correspondingly dramatic improvement in educational achievement at all levels--preschool through secondary--the educational facilities for the hearing will continue to be of real use and value only to a few of the exceptionally gifted deaf, unless some kind of special assistance is provided to counteract the educational deprivation from which the deaf suffer.

In the following paragraphs, the Committee sets forth its judgment on specific areas of need in the provision of post-secondary educational programs to serve the deaf, followed in the next section by recommendations to meet the needs.

A Wider Range of Choices

For most deaf persons the only post-secondary educational experience available is the liberal arts program of Gallaudet College. This means a choice between a trade of limited complexity for which they have received some training in secondary school and a liberal arts college experience.

The deaf, like the hearing, should have an opportunity to exercise the widest practicable selection of careers. Each deaf person should be assisted to achieve to the limit of his abilities, but it is all too often assumed that these are very narrowly restricted for a person who suffers a hearing loss. It is true that the hearing loss makes the learning of language and speech extremely difficult. This in turn creates difficulties in developing innate abilities, but there are many deaf persons who are able with minor special help to overcome these difficulties. Too often, such minor special help is lacking.

In view of the relatively small number of deaf students comprising the potential post-secondary educational market each year, it is obviously impracticable to contemplate an array of junior colleges, liberal arts colleges, engineering and technical institutes, professional courses for advanced degree work, etc., exclusively for the deaf. It is practicable, however, to provide in some of our post-secondary institutions, from junior colleges to the more advanced professional schools, certain special facilitative services to enhance the prospects of deaf students' success in following any of a wide range of choices. Some specific suggestions will be offered at the end of this chapter.

Technical and Vocational Education and Training Needs

Educators of the deaf generally agree that the present provision for technical and vocational education and training is inadequate. This is not surprising in view of the growing recognition of the need to effect great improvements in our system of vocational education and training for all students.

The Vocational Education Act of 1963 (P.L. 88-210) gives practical recognition to the changing needs in this field by extending federally-aided vocational education into post-secondary programs.

We need a new emphasis on post-secondary vocational education programs for the deaf. Such would release present vocational education departments of schools for the deaf for prevocational orientation--a development which has already occurred in many such schools largely because of the increasingly costly and complex equipment required for terminal vocational offerings. Many of the less complicated trades could continue to be taught to the more limited students. For most students, additional time could be devoted to the teaching of those academic subjects in which the deaf need more instruction and to the improvement of communication skills.

Adult Education

The deaf need access to more courses offering opportunities to learn more about insurance, changes in social security programs, tax issues in which they have a vital interest, developments in national and international affairs as well as in state and local government, legal matters (wills, license requirements, deeds, etc.), and the raising of children. In addition, there are many adult education courses with a semivocational application which would enhance the resources that the deaf have to offer.

Recommendations

The Committee recommends:

1. That the Office of Education inaugurate a 5-to-10-year demonstration program involving the establishment of special facilitative services for deaf students at cooperating colleges and universities throughout the country designed to enhance the likelihood of academic success of deaf students therein. Emphasis in the

program should be initially on fields of study not generally available to deaf students, such as engineering, architecture, and the professions, but not to the exclusion of liberal arts curricula.

Careful inquiry should be made and an experimental attitude maintained in order to determine what facilitative services will be most helpful.

The demonstration program should be initiated on a modest basis with perhaps six to eight institutions participating. It should involve complete reimbursement of the participating institutions for the extraordinary costs of providing such a program, including allocated overhead.

The progress of the program should be carefully studied and evaluated to assess (a) the educational and social effects, (b) the comparative cost of such a program, as contrasted with the cost in a specialized college for the deaf, and (c) any emerging deficiencies that should be corrected by prompt action.

2. That a similar demonstration program be undertaken at a number of junior colleges throughout the country which are designated as "area vocational education schools" by the Commissioner of Education. Emphasis in selection should be placed on those institutions serving areas in which substantial numbers of deaf students are to be found, but where no residential vocational education schools are contemplated under Section 14 of the Vocational Education Act of 1963.

3. That similar facilitative services for deaf students be provided on a continuing basis in the residential vocational education schools approved by the Commissioner of Education under Section 14 of the Vocational Education Act of 1963 and that sufficient funds be included to finance them.

4. That the Office of Education consider in the light of its continuing evaluation of the foregoing demonstration programs whether the vocational and advanced technical educational requirements of deaf students are being adequately met, or whether there is a need for federally supported regional vocational education schools and a national technical institute exclusively for the deaf.

5. That the Office of Education prepare, distribute, and publicize informational materials designed to stimulate through state adult education programs the offering of classes for the adult deaf; and that the state educational authorities seek the participation of organized groups of adult deaf and their leaders in initiating such programs.

IV. GALLAUDET COLLEGE

Gallaudet College as the only post-secondary educational institution concerned exclusively with the deaf has been given particular attention by the Committee. This chapter discusses in some detail the purposes, programs, problems, and accomplishments of the college.

Brief Review of History and Growth

The Columbia Institution for the Instruction of the Deaf and Dumb and the Blind was chartered by the United States Congress in 1857. It opened in Washington, D. C., that same year with five pupils.

On April 5, 1864, President Lincoln signed an Act of Congress authorizing the Columbia Institution to "grant and confirm such degrees in the liberal arts and sciences to such pupils of the Institution, or others, who by their proficiency in learning or other meritorious distinction they shall think entitled to them, as are usually granted and conferred in Colleges . . . ." In June of 1864 a collegiate department of the Columbia Institution, known as the National Deaf Mute College, was established with an appropriation of $26,000 from the Congress. The word "blind" was removed from the name of the institution in 1865 and the blind students of the lower school were transferred to the school for the blind in Maryland.

In 1894 the directors changed the name of the college department to Gallaudet College in honor of Thomas Hopkins Gallaudet, the founder of the first school for the deaf in the United States. The elementary and secondary institution had come to be known as the Kendall School. By 1910, the college had a student body of about 30 and had added a preparatory department and a postgraduate normal course for the training of teachers of the deaf.

In the late 1940's a number of fundamental issues affecting the nature and purpose of Gallaudet College were raised and acted upon. An attempt was made to strengthen the academic program. An early inspection of the college by the regional accrediting organization suggested that Gallaudet College was "plodding along with inadequate and makeshift facilities."[1/] After consultation between several federal agencies and the college, the Office of Education agreed in 1949 to make a survey of the college with a view to assessing its immediate needs. The subsequent report called for continued and greater support by the Federal Government, a revision of the charter, and immediate planning for expansion of housing and instructional facilities. The charter revision was enacted in 1954 and the name of the entire institution was changed to Gallaudet College.[2/] The same act provided for the definition of the corporate powers of the college, the constitution and authority of the board of directors, and the appropriation of "such sums as the Congress may determine necessary for the administration, operation, maintenance, and improvement of Gallaudet College, including sums necessary for student aid . . . and construction of buildings . . . ."

This legislative act initiated a period of very rapid expansion of the college physical plant, the faculty, and the student body. Between 1955 and the present, 10 new buildings have been completed on the campus, 2 are under construction, and planning money has been appropriated for 2 more. Total enrollment in the college has increased from about 125 in 1945 to 761 in 1964. Total faculty for Gallaudet College, including the Kendall School, numbered 145 in 1964.

In the past decade the curriculum of the college has been strengthened and broadened along with improvement of the physical plant. Emphasis has been placed on strengthening the academic programs, and several nonacademic vocational programs have been curtailed or deleted from the offerings of the college. Full academic accreditation was granted to Gallaudet College by the Middle States Assocation of Colleges and Secondary Schools in 1957.

[1/] Atwood, Albert W., Gallaudet College - Its First Hundred Years, 1964, Gallaudet College, Washington, D. C.

[2/] Public Law 420, 83rd Congress.

In addition to its regular functions as an institution of higher education, Gallaudet College is an important center for research on deafness and education of the deaf and an important contributor, through its graduate program, to the supply of teachers of the deaf.

The College at Present[3]

The selection of applicants for admission to any college is frequently a complex and unsettling task. The admissions policy of a college must be attuned to its institutional role in society at any point in time. This role is reflected in its aims, character, and educational programs, and these change in response to special needs at special times. The policy must be responsive to such realities as the nature of the applicant population, society's needs, and the current resources of the institution. The lack of highly valid predictors of student success further complicates the matter of selection.

Admissions Policy and Practice

The process of admitting students to Gallaudet College is made more complicated because the applicants are deaf in varying degrees. The admission process must determine that the applicant's handicap is severe enough to prevent him from progressing satisfactorily at a college for the hearing. Measures of the student's scholastic achievement and aptitude must be evaluated in relation to the degree and age-at-onset of the deafness handicap. It must be borne in mind, too, that Gallaudet College is the only institution in the nation where most deaf persons can at present expect to study successfully beyond the secondary level.

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[3] In its evaluation of the college, the Committee was assisted by an assessment of Gallaudet's status as a liberal arts college, submitted after a visit to the campus of several days by a group of college educators not connected with the education of the deaf. The group consisted of Dr. Frederick K. Miller (Ph.D in History, University of Pennsylvania), President, Lebanon Valley College, Annville, Pennsylvania, who served as Chairman; Dr. William C. Lee (Ph.D in Biochemistry, University of Michigan), Professor of Chemistry and formerly Dean, Central State College, New Britain, Connecticut; Dr. Paul Reynolds (Ph.D. in Zoology, Johns Hopkins University), Dean of the College, Wilmington College, Wilmington, North Carolina; and Dr. Herman Spivey (Ph.D. in English, University of North Carolina), Vice President for Academic Affairs, University of Tennessee, Knoxville, Tennessee.

A statement by the dean, January 1, 1963, sets forth a philosophical view of the problem:

> "As long as Gallaudet continues to be the only college for the deaf, we have an obligation to accept any applicant whom we have reason to believe can succeed here. We should never limit our admissions to the best prepared few. As long as we continue to challenge the unusually able student, we have no justification for turning away the average student: he has no place to go for a college education if we do not accept him."

Admissions policy is formulated through an admissions committee consisting of three faculty members, the president, and the dean. The director of admissions has primary responsibility for the selection of new students, but he refers to the admissions committee those applicants whose admissibility is doubtful under established policy.

Admission to Gallaudet College is based on several factors. In the first place, the applicant must show evidence that his hearing loss "is of such a nature that he would have difficulty in attending a comparable institution of higher learning designed for students with normal hearing."[4] Other criteria used are: (1) applicant scores on the Stanford battery of achievement tests, the Inglis test of English vocabulary, an English composition test developed by the Gallaudet faculty, and the Lankton Cooperative Algebra examination;[5] (2) the applicant's high school academic record and scholastic rank in class; and (3) recommendation from an official in the applicant's secondary school.

Since 1955, applications to Gallaudet College have increased by an average of about 10 per cent each year. In the same period, the college has admitted roughly 40 to 50 per cent of all applicants. About 85 per cent of the students admitted each year are required to complete the 1-year preparatory program before they are considered for advancement to the freshman class.[6]

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[4] Gallaudet College Catalogue, 1963-1964, Requirements for Admission, p. 35.

[5] There are no established minimum test scores required for admission. An applicant's performance is considered in its entirety, and low performance on one test is not necessarily disqualifying.

In spite of the recent increase in applications for Gallaudet, the achievement levels of the applicant population have remained reasonably constant over the past 10 years. The college has thereby been able to accept a larger number of students each year without any measurable decline in the academic caliber of the entering classes since 1954. (The fact that a larger proportion of entering students come from schools other than residential schools may serve as a partial explanation of this result, since the more profoundly deaf are to be found in residential schools. See Appendix D.)

Evidence of this may be found in Table 8, in which available average scores of admitted students on several tests are shown for the years 1955, 1957, 1959, 1961, and 1963. This table represents the distillation of several detailed analyses undertaken in the course of the study. Nothing in our examination brought into question the finding of a similar 1963 review, to the effect that the record of qualification of admitted applicants has been one of minor fluctuation without statistical significance.[7]

The Preparatory Department

A clear distinction should be drawn between the curriculum of the college and the program of the preparatory department. Only about 15 per cent of the students admitted to Gallaudet College each year are found to be prepared to enter immediately upon a program of study equivalent to the first year of college. The remainder of each entering group is enrolled in the preparatory department. The one-year preparatory

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[6] See Table 7.

[7] Donovan, Alfred D., and Davis, Irene M., Admission and Retention of Students at Gallaudet College. (Mimeo.), March, 1963.

Table 7

ADMISSION AND REJECTION OF ALL APPLICANTS
TO GALLAUDET COLLEGE: 1955-63

Year	Number of Applicants	Rejected		Admitted			
				Freshmen		Preparatory	
		No.	Per Cent	No.	Per Cent	No.	Per Cent
1955	204	104	51	17	8	83	41
1956	186	97	52	15	8	74	40
1957	253	135	53	13	5	105	42
1958	272	171	63	12	4	89	33
1959	291	176	60	21	7	94	32
1960	303	181	60	17	6	105	35
1961	358	180	50	21	6	157	44
1962	437	241	55	39	9	157	36
1963	460	229	50	39	8	192	42
Total	2,764	1,514	55	194	7	1,056	38

Table 8

AVERAGE SCORES OF STUDENTS ADMITTED
TO GALLAUDET COLLEGE IN 1955, 1957, 1959, 1961, AND 1963

Tests	1955	1957	1959	1961	1963
Stanford Achievement Test					
Average reading (grade equivalent)	8.2	8.4	a/	8.0	8.1
Battery average (grade equivalent)	b/	9.7	a/	9.5	9.7
Cooperative School and College Ability Tests					
Verbal aptitude	b/	265.6	266.1	261.7	262.1
Quantitative aptitude	b/	285.8	286.3	291.3	289.2
Essential High School Content Battery c/					
Mathematics	36	39	47	b/	55
Science	6	11	12	b/	15
Social Studies	14	11	13	b/	16
English	17	22	25	b/	19

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a/ The California Achievement Test was administered in 1959.

b/ Not available.

c/ These are not scores, but a representation of the per cent of Gallaudet entering students that scored as high as half of all students who took the test in these years.

program consists of intensive study in those areas of the secondary curriculum where the deaf tend to be retarded in achievement. Particular emphasis is placed upon reading, English composition, and algebra.

At the close of the preparatory year those students completing it again take the admissions and other examinations. The test results are used to determine whether the student is to be promoted to the freshman class, to repeat part or all of the preparatory program, or to be dismissed from the college. Between 1945 and 1958 approximately 30 per cent of each preparatory class was dismissed or had withdrawn by the end of the preparatory year. Attrition from the program has decreased only slightly in recent years. The preparatory year is, therefore, not only an extension of the secondary education of a number of the deaf; it serves also as another criterion for the selection of students for a Gallaudet College education.

Scope and Quality of Offering

Once admitted to college-level work, the Gallaudet student encounters a curriculum representative of liberal arts colleges of similar size (see Table 9). All students are required to take a balanced program of general education in addition to their major subjects, and basic arts and sciences are emphasized during the first two years. The minimum requirement in general education consists of 12 hours in the social sciences, 8 hours in the laboratory sciences or mathematics, 12 hours in humanities, and 12 hours or the equivalent in a modern foreign language. Junior and senior students are limited to a maximum of 30 hours of course work in their major fields during these last 2 years.

The Division of Science and Mathematics instructional staff consists of 10 faculty members, 1 of whom has the Ph.D. degree. Six others have earned the master's degree. Forty-seven courses are offered by this division. In 1963, forty junior or senior students were majoring in one of the natural sciences or in mathematics.

Table 9

THE GALLAUDET COLLEGE CURRICULUM: COURSES LISTED BY DEPARTMENT AND LEVEL, 1963-64

	Course Levels				
Department	Lower Undergraduate	Upper Undergraduate	Seniors Only	Graduate	Totals
Biology	3	8	--	--	11
Chemistry	6	6	--	--	12
Mathematics	4	6	--	--	10
Physics	6	7	1	--	14
Division subtotals	19	27	1	--	47
Economics	--	11	--	--	11
History and Political Science	4	8	--	--	12
Psychology	--	8	--	1	9
Sociology	--	9	--	--	9
Divisional	2	2	--	--	4
Division subtotals	6	38	--	1	45
Art	--	12	4	--	16
Classics	4	--	--	--	4
Drama	--	4	--	--	4
English	9	12	2	--	23
German and Russian	8	10	--	--	18
Philosophy	--	8	--	--	8
Religion	--	11	--	--	11
Romance Languages	12	17	--	--	29
Divisional	4	--	--	--	4
Division subtotals	37	74	6	--	117
Audiology	4	1	--	7	12
Business Administration	--	11	--	--	11
Education	2[a]	6	2[b]	24	32
Home Economics	2	12	--	--	14
Library Science	--	11	2[c]	--	13
Physical Education	4	12	--	--	16
Printing	4	--	--	--	4
Division subtotals	14	53	4	31	102
College totals	76	192	11	32	311

Source: Gallaudet College Catalogue, 1963-1964.

[a] Noncredit courses and not included in totals.

[b] Practice teaching.

[c] In-service training.

The teaching staff of the Division of Social Studies numbered 13 persons in the academic year 1963-1964. Of these, two held the Ph.D. degree. Course listings in the catalogue for the division numbered 45 in 1963 and, as is the case in the Division of Science and Mathematics, represent in the aggregate only the minimum number of courses required for a major in any of the several fields of the division. Twenty upper-class students had declared majors in the social studies in 1963.

In the Division of Humanities much of the teaching is in the form of service courses to support the general education requirements of freshmen and sophomores. This division has shown the most growth in recent years; course offerings have increased from 86 to 117 since 1956. There were 22 juniors or seniors with majors in the humanities in 1963. The emphasis upon improvement of facility in the English language common to the education of the deaf is continued at the college level. Two full years of English composition are required of all students. It is noteworthy that the study of a foreign language is required at Gallaudet. Study in foreign language, in addition to its primary goal, has been effective in strenghtening reading and grammatic skill in English--a skill which is particularly troublesome for the deaf, deprived as they are of the customary oral-aural language experience.

In addition to these three main areas of liberal arts, Gallaudet offers some undergraduate courses in audiology, business administration, education (not an undergraduate major), home economics, library science, physical education, and printing. With the exception of printing, these subjects are frequently found in the curricula of other liberal arts colleges. Out of 61 graduates in 1964, twenty-four had majors in these subjects: 13 in library science, 6 in physical education, 4 in home economics, and 1 in business administration. All students majoring in any of these professional programs have to meet the full requirements in general education and are limited, like majors in other subjects, in the number of hours they may take in their major field.

The formal curriculum is regularly supplemented by a variety of extracurricular activities including dramatics, modern dance, the graphic arts, and lecture series. Student participation in these programs is strongly encouraged at Gallaudet in recognition of the potential intellectual and artistic enrichment of both students and faculty.

The library currently has 77,000 volumes and about 300 to 400 periodical subscriptions and is open 83 hours a week. Funds for acquisition of new books are usually inadequate to meet the orders placed by the several academic departments. There is a distinguished and nearly comprehensive library of books and articles on deafness, including microfilm copies of theses and dissertations related to deafness.

Student Achievement

Levels of learning or achievement at the college level are not so easily or commonly measured as they are in elementary and secondary programs. Colleges have neither the curricular nor student population similarities that are required for the construction and administration of standardized tests. Gallaudet College has, however, attempted to make use of some of the more common testing instruments and the results allow for a tentative assessment of the results of the academic program.

The Essential High School Content Battery is given to preparatory students at the beginning and after completion of that year of study. Over the past decade the students have scored somewhat lower than national norms on this battery at admission; at the close of the preparatory year each class has registered an increase in achievement to the extent that it approaches and occasionally surpasses the national standard for high school seniors.

The Graduate Record Examinations of the Educational Testing Service form the most commonly used testing battery for assessing achievement of college seniors. Gallaudet College has administered the GRE area achievement tests to each senior class since 1955. When the average performance for Gallaudet senior classes is compared to those for the other 242 colleges which tested complete classes of 25 or more seniors in 1962-63, it is found that there are between 10 and 17 colleges with average performances lower than Gallaudet (see Table 10). Individual student performance falls almost entirely below the median for all students taking the examinations.

Table 10

DISTRIBUTIONS OF COLLEGE AVERAGES FOR AREA GRADUATE RECORD EXAMINATIONS OF COLLEGE SENIORS, SHOWING THE GROUPS IN WHICH GALLAUDET COLLEGE SENIORS FALL[a]

Scaled Score Intervals	Number of Colleges with Averages in the Scaled Score Intervals Listed at the Left		
	Social Science	Humanities	Natural Science
700-719	--	--	1
680-699	--	--	--
660-679	--	--	--
640-659	--	--	1
620-639	--	--	1
600-619	1	1	4
580-599	1	4	--
560-579	5	12	3
540-559	4	21	6
520-539	6	26	18
500-519	17	32	28
480-499	19	30	39
460-479	35	38	49
440-459	38	34	42
420-439	45	12	25
400-419	29	14	9
380-399	17	5	$\boxed{7}$G
360-379	8	$\boxed{5}$G	6
340-359	$\boxed{5}$G	3	4
320-339	3	4	--
300-319	5	2	--
280-299	4	--	--
260-279	1	--	--
240-259	--	--	--
Total number of colleges	243	243	243
Total number of students	31,544	31,544	31,544

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[a] Based on colleges testing complete classes of 25 or more seniors, 1962-63.

$\boxed{}$G Denotes the group in which the Gallaudet College average falls.

While it is clear that the record does not compare favorably with that of liberal arts colleges generally, it must be borne in mind that college-level achievement needs to be related to the achievement status of the students at the time of admission. Given both the relatively low achievement levels alluded to earlier, and the fact that the handicap which resulted in such levels still afflicts the students throughout the college period, the relatively low standing on the Graduate Record Examination is not surprising.

A year-to-year comparison of the Graduate Record Examination scores of senior classes indicates some, but small, improvement in scores since 1955 (see Table 11). It is noteworthy that the average rate of attrition from the college (preparatory year excluded) has been about 30 per cent, including both dismissals and voluntary withdrawals. The survival of 70 per cent of the freshmen classes to graduation is higher than the national experience of approximately 50 per cent retention.

On the whole, the performance of deaf students is disappointing at each point in the educational process at which the Committee has been able to assess it. It seems clear that we do not know how to tap the potential of this group of citizens. There is clearly a need for well-supported program research in this field.

The Faculty

At present the faculty of the college numbers approximately 100 (administrative officers included), with 20 per cent having the earned doctorate degree.[8/] This is relatively low for good liberal arts colleges, but the percentage is growing and several of the current faculty are nearing completion of doctoral programs. Another 60 per cent of the teaching faculty hold the master's degree.

[8/] By way of contrast, it is interesting to note that in the "Gallagher Report" (The Federal Government and the Higher Education of the Deaf, Office of Education, 1949), it was noted that only 1 of 20 faculty members had an earned doctorate in 1949.

Table 11

GRADUATE RECORD EXAMINATION MEDIAN SCORES[a/] FOR APTITUDE AND AREA TESTS OF GALLAUDET COLLEGE SENIORS, 1955-64, COMPARED WITH THOSE OF 21 COLLEGES MAKING UP THE NORMS FOR THE PERIOD[b/]

Year	Verbal Aptitude	Quantitative Aptitude	Social Science	Humanities	Natural Science
1955	340[c/]	380	300	340	350
1956	320[c/]	380	260	345	370
1957	255	340	280	340	380
1958	240	320	265	320	370
1959	270	335	290	345	360
1960	290	315	270	335	365
1961	330	375	335	375	400
1962	290	355	325	345	385
1963	300	345	350	370	400
1964	330	360	335	370	400
Median for normative group	490	480	495	500	480

[a/] Rounded to nearest multiple of five.

[b/] Educational Testing Service has included the following in establishing norms for the aptitude and area tests: Allegheny College, Antioch College, College of New Rochelle, College of St. Catherine, De Paul University, Duquesne University, Emory University, Lehigh University, Muhlenberg College, Newcomb College, St. Louis University, Southern Methodist University, State University of Iowa, University of Buffalo, University of Detroit, University of Georgia, University of Louisville, University of Miami (Florida), University of South Carolina, Wayne University, and Whitman College.

[c/] These averages are artificially high, since the minimum score possible prior to 1957 was 310; since then, it has been 200.

Teaching loads are lighter than are commonly encountered in colleges of comparable size because of the specialized problems encountered in teaching the deaf. In 1963-64 the faculty members taught an average of 9 credit hours per semester; average class size was 14. The average total number of students taught per instructor per semester was 44.4.

Faculty morale is noticeably high, and a strong dedication to the work of Gallaudet College is apparent. Attendance at professional meetings is encouraged and financially facilitated. There is a growing emphasis upon scholarly research and publication among the faculty, particularly in the areas related to deafness, education of the deaf, and institutional study.

Faculty salaries have shown a marked growth over the past decade and are at present comparable to those paid in similar institutions. Promotion is related to the highest earned degree in addition to the usual tenure and performance qualifications.

Profile of a Class

The group of students entering Gallaudet in the fall of 1959 was selected for analysis in order to gain more concrete knowledge of some of the relationships involved. Since most of the students entering then would be placed in the preparatory year, 1959 was selected because it was the latest year whose entering students might be expected to finish by the present time.

There were 291 applicants, of whom 116 (40 per cent) were admitted--95 to the preparatory class and 21 directly to the freshman class. By coincidence, 95 came from public residential schools and 21 from other schools and classes. Of those coming from public residential schools, 12 entered the freshman class directly and 83 were placed in the preparatory class. Nine of the students from other schools and classes started as freshmen and the other 12 as preparatory students.

Chart III compares selected median achievement test scores of those entering from public residential schools and other schools.[9] In language and in total achievement (battery average), the results are virtually the same. In reading, however, the public residential school graduates tested nearly a full grade lower than graduates of other schools. On the other hand, their median score in mathematics was more than a full grade higher.

The present status of the 116 students is displayed in Chart IV. Those who voluntarily withdrew or were academically dismissed total 63. The other 53 have either graduated with an undergraduate degree or are now completing the requirements for it. Assuming successful completion by the 11 in this latter group, 46 per cent of the entering students in the fall of 1959 will have successfully completed the college course. But Gallaudet is not a typical college. It offers a preparatory year to help deaf students, most of whom are not academically ready for college entrance. Excluding the 41 students who failed to complete the preparatory year, 75 of the 116 were really accepted for college work as freshmen in either 1959 or 1960. Of this group, 55 per cent have already received undergraduate degrees and an additional 15 per cent are currently completing their required work.

Charts V and VI show the relationship between the present status of the 116 entering students and their performance on the California Achievement Test before acceptance and their grades in college respectively. The picture these charts show is generally what one would expect, except that there is a greater contrast between the college grades of those succeeding and failing than between their test scores prior to acceptance. It may be noted that the median California scores of those academically dismissed are about the same as those currently completing their work, with the significant exception of reading, in which those dismissed scored more than half a grade lower. (In mathematics, on the other hand, they scored nearly a grade higher.)

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[9] In 1959, the California Achievement Test was administered instead of the Stanford Achievement Test. There is general agreement that the California Test yields scores of from one to two grades higher than the Stanford Test.

Chart III

COMPARISON BETWEEN MEDIAN CALIFORNIA ACHIEVEMENT TEST SCORES OF 116 STUDENTS ENTERING GALLAUDET COLLEGE FROM PUBLIC RESIDENTIAL SCHOOLS AND OTHER SCHOOLS
1959

Shows for each group the median test scores in reading, language, mathematics, and total achievement and the range of test scores for each.

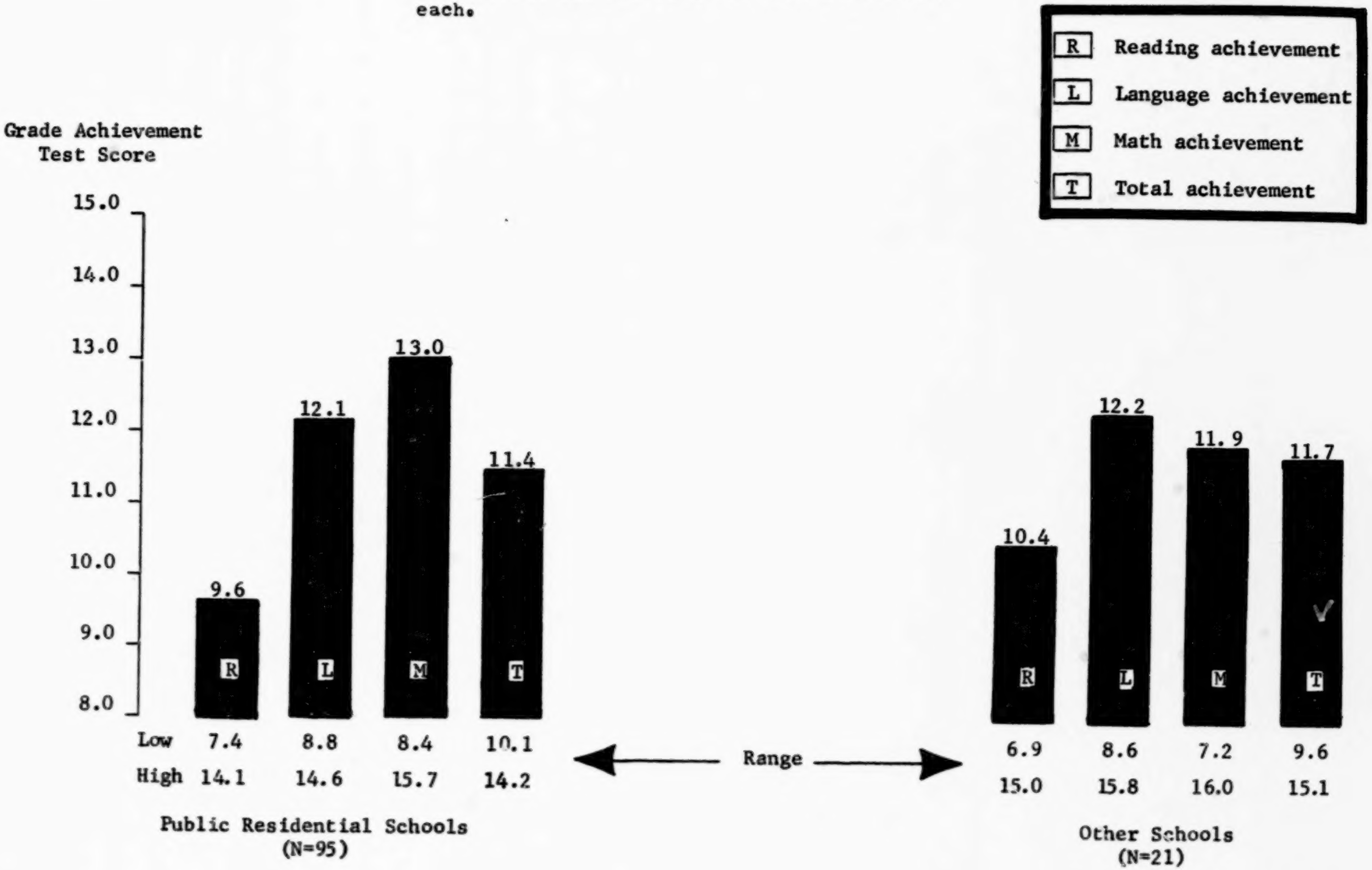
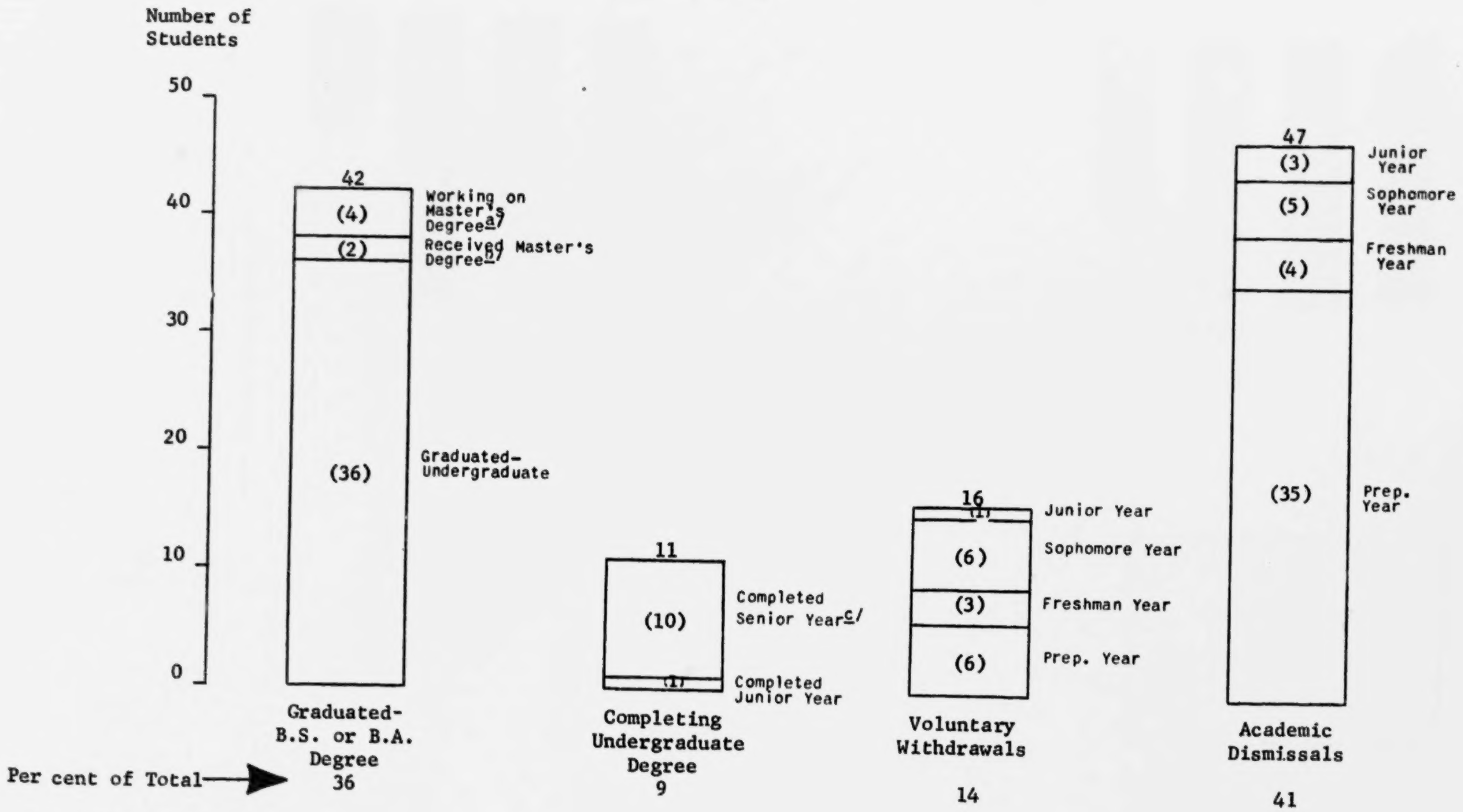


Chart IV

STATUS OF THE 116 STUDENTS (PREP. OR FRESHMAN)
ENTERING GALLAUDET COLLEGE IN 1959
JUNE 1964



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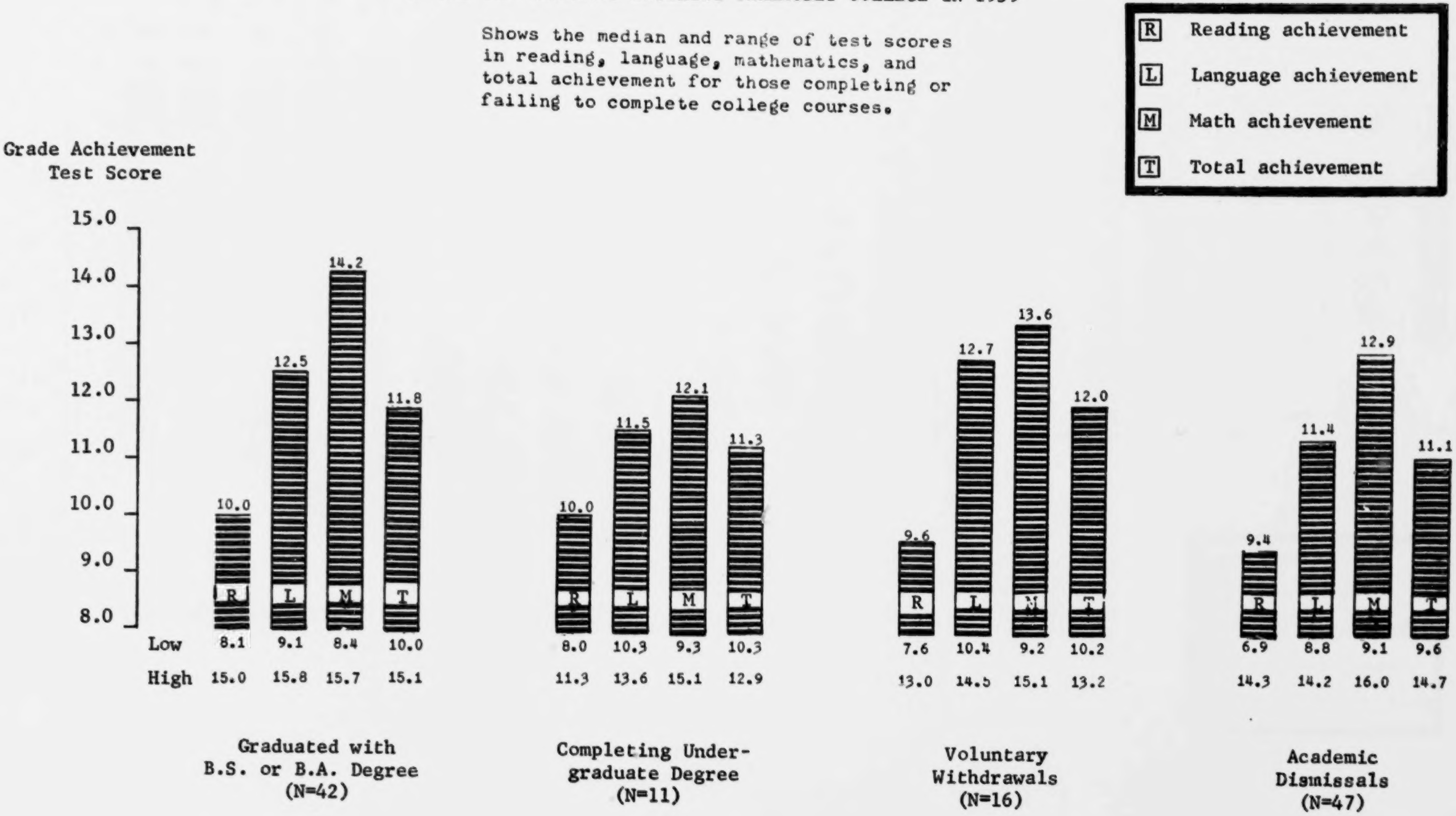
[a] Received undergraduate degree and presently completing work for Master's degree.

[b] Received Master's degree after completing undergraduate credits.

[c] Senior year completed, but not enough credits for graduation.

Chart V

RELATIONSHIP BETWEEN PRESENT STATUS AND MEDIAN CALIFORNIA ACHIEVEMENT TEST SCORES OF THE 116 STUDENTS ENTERING GALLAUDET COLLEGE IN 1959

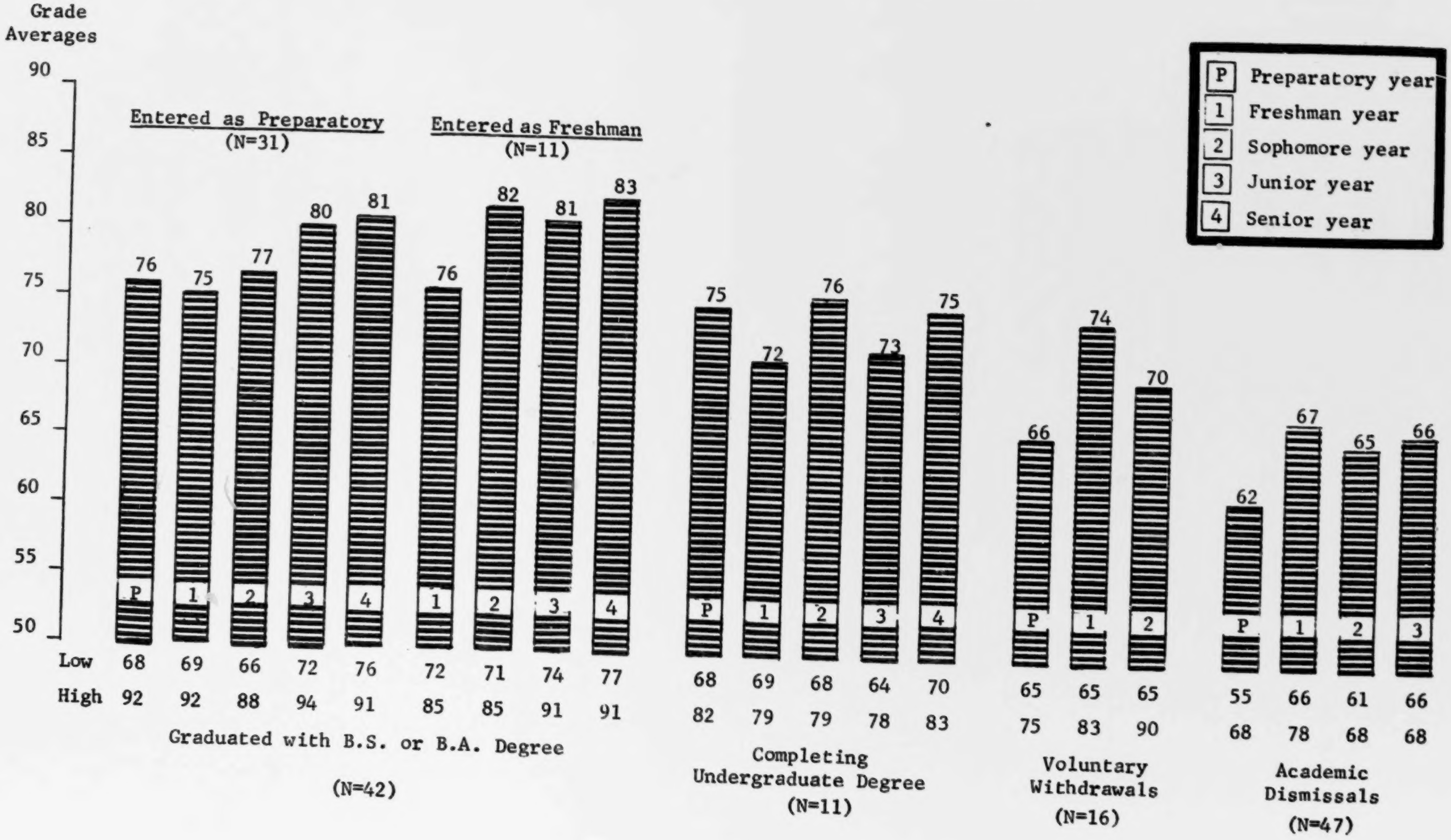


Shows the median and range of test scores in reading, language, mathematics, and total achievement for those completing or failing to complete college courses.

Chart VI

RELATIONSHIP BETWEEN PRESENT STATUS AND YEARLY MEDIAN GRADE AVERAGES OF THE 116 STUDENTS ENTERING GALLAUDET COLLEGE IN 1959

Shows for each year of attendance the median and range of grade averages for those completing or failing to complete college courses.



An analysis such as this proves little, but it does help to clarify some points and to stimulate a desire to know much more about the students, the circumstances surrounding their hearing losses, their family backgrounds, the educational programs, methods, and influences to which they have been exposed, their personalities and a host of environmental factors. It is to be hoped that longitudinal or retrospective research programs may be undertaken (see Chapter VI) from which significant conclusions about the educational process for deaf children may be drawn.

Support, Governance, and the Role of the Federal Government

Public Law 420, 83rd Congress, which amended the original charter, invests Gallaudet College with full private, corporate ownership and with full and independent rights of property.

It further provides that the college shall be under the control and direction of a 13-member board of directors composed of 3 public members (1 U.S. Senator and 2 Representatives) and 10 other members to be elected as vacancies occur by the board itself. One of these 10 members must be nominated by the Gallaudet College Alumni Association and serves for a fixed term of 3 years. The terms of the public members are fixed at two years, and the terms of the remaining members are not limited.

The board of directors is charged with the customary responsibilities for the governance of the college including control of expenditures of all moneys, funds, and property. All transactions and accounts involving federal funds are subject to audit by the General Accounting Office.

The board of directors has historically been and continues to be composed of members (other than public members) from the metropolitan area of the District of Columbia.

The principal administrative officers of the college are the president, the dean of the college, the business manager, and the principal of the Kendall School. The president is at present a member of the board of directors, and the business manager serves as its assistant secretary-treasurer, but not as a member. The faculty is encouraged to participate in the governance of the college through faculty meetings and membership on a variety of administrative committees.

Gallaudet College is financed primarily by direct appropriations from Congress through the budget of the Department of Health, Education, and Welfare. Congressional appropriations made up approximately 68 per cent of the $2,520,600 operating budget for fiscal 1964. Congressional support of new building programs in recent years has met approximately 90 per cent of the financial requirement. The practice of Federal financial responsibility for Gallaudet College has been in continuous effect since the establishment of the college in 1864. Public Law 420 contains the following appropriations authorization:

> "There are hereby authorized to be appropriated such sums as the Congress may determine necessary for the administration, operation, maintenance, and improvement of Gallaudet College, including sums necessary for student aid and research, for the acquisition of property, both real and personal, and for the construction of buildings and other facilities for the use of said corporation." (Sec. 8)

The secondary source of operating revenues for the college is payments from state vocational rehabilitation agencies, parents, and the District of Columbia for students enrolled in the college and the Kendall School. Total income from these sources amounted to $798,643 in fiscal year 1964.

Finally, Gallaudet College is authorized "to receive by gift, devise, bequest, purchase or otherwise, property, both real and personal, for the use of said Gallaudet College . . ." (P.L. 420). Total income from endowment, gifts, and grants for the past year was $21,293.

The role of the Federal Government in the support and governance of Gallaudet College can best be seen through a listing of the statutory and other informal links between the Government and the college.

A. The college is chartered and enabled to confer degrees by the Congress of the United States. Public Law 420 creates the following rights and responsibilities of the Federal Government with respect to Gallaudet College:

   1. The board of directors must have the approval of the Secretary of Health, Education, and Welfare in order to sell, mortgage, or otherwise dispose of property.

   2. Three of the 13 members of the board of directors shall be appointed from the Congress: 1 Senator by the President of the Senate; 2 Representatives by the Speaker of the House of Representatives. (By custom, the Secretary of Health, Education, and Welfare, or his representative, serves as 1 of the 10 other members.)

   3. Settlement and adjustment of all financial transactions and accounts involving Federal funds shall be made by the General Accounting Office.

   4. The Secretary of Health, Education, and Welfare shall receive an annual report from the board of directors describing the enrollment, programs, and financial status of the corporation.

   5. The Congress assumes responsibility for the financial support of the college.

   6. The personnel occupying full-time, permanent, budgeted positions are included in the U. S. Civil Service retirement, health benefit, and life insurance programs.

B. The Federal Government supports the college indirectly through:

   1. Research grants to faculty members through the appropriate Federal agencies.

   2. Grants to students through the federally-aided state vocational rehabilitation agencies to help meet student tuition, room, board, book, and other costs.

3. The transfer of funds from the government of the District of Columbia to pay for the elementary and secondary education of deaf residents of the District of Columbia at the Kendall School.

In practice, the role of the Federal Government in the actual governance of the college has been minimal. The public members of the board of directors have played a modest role in the meetings of that body. The business manager works closely with officials of the Department of Health, Education, and Welfare in the preparation of the budget of the college. In the main, the Federal Government's role *vis-a-vis* Gallaudet College has been to make available the funds necessary for the operation and growth of this national college for the deaf.

Current Problems

Gallaudet College has proceeded in recent years to strengthen its academic program, to construct a liberal arts curriculum, and to dispose of vocational programs. Some educators of the deaf questioned this policy and have contended that study in the liberal arts and sciences is beyond the educational capability of most people handicapped by deafness.

The present board, administration, and faculty of Gallaudet College are firmly committed to the liberal arts and sciences program and to the proposition that this curriculum will best develop the students intellectually and spiritually and best prepare them for successful pursuit of a broad variety of careers.

Expansion and Enrollment

The total enrollment of Gallaudet College (including preparatory and graduate students) increased from 265 in 1953 to 761 in 1964. This represents a rate of growth of about 10 per cent per year for the period. The most recent projection of enrollment made by the college for its request for appropriations for 1965 showed an anticipated enrollment of 857 in the fall of 1966. Application of the recently experienced 10 per cent per annum rate of growth to this figure yields a projected enrollment for Gallaudet College of about 1,250 students in 1970.

The relatively recent growth in the enrollment of Gallaudet College is attributed to a combination of factors: (1) increases in enrollment in the state residential schools for the deaf; (2) increases (both absolute and proportional) in applications from students who have attended day schools and classes for the deaf or who have been educated, with special assistance, in hearing schools; and (3) the increased attractiveness of a Gallaudet education as a result of the strengthening of the arts and sciences curriculum, accreditation, plant improvements, etc.

Some of those who have expressed dissatisfaction with the work of the college have suggested that the enrollment has been increased too rapidly in recent years and that projections for the future should be reduced. They argue also that a liberal admissions policy has allowed poorly prepared students to be enrolled and that the quality of the academic program has suffered. But enrollment at Gallaudet has not kept pace with the colleges for the hearing. In 1900 the ratio of enrollment in hearing colleges to total elementary and secondary enrollment was 1.4 to 100. In 1960 that ratio had increased to 9.3 per 100. In the same interval, the enrollment of Gallaudet College has increased from 1.1 per 100 students in elementary and secondary schools and classes for the deaf to only 1.5 to 100.

Structure of Governance

The location of final responsibility for college governance and policy direction in a lay board of directors is a common and accepted practice among American colleges and universities. There are, however, aspects of the composition of the board of directors of Gallaudet College which are unusual and have been the subject of some criticism.

The limitation on the size of the board to 13 members causes it to remain small in spite of whatever growth has taken place or may take place in the size of the institution or the scope of its activities.

One of the traditional sources of financial support and policy guidance for colleges is the alumni. Gallaudet, while publicly financed to a large degree, remains a private college serving a population with a special handicap. The Alumni Association of the college has in recent years expressed a desire for greater representation on the board of directors. The Association is presently authorized to nominate one member of the board.

While it undoubtedly is a convenience for most of the members of the board to be residents of the District of Columbia and immediate area, particularly inasmuch as the board meets as frequently as once each month, it is unusual for the board of a college which is national in its outlook and student body to consist of residents of one metropolitan area.

The practice of having the business manager of the college serve as assistant secretary-treasurer of the board of directors has undoubted advantages. The arrangement has been criticized, however, as offering an easy avenue by which individual board members may bypass the president in their dealings with the business administration of the college. This would violate a cardinal principle that a policy-making board should deal with and through its chief administrative officer.

Finally, the inclusion of the president of the college on the board of directors has been questioned (1) as an advisable management practice and (2) in view of the limited size of the board. More commonly, the president of a college reports to his board on the work of the institution and is charged with the responsibility for giving effect to the policy decisions of the board.

Relations with Secondary Schools

Gallaudet College has in the past few years been criticized by some on the grounds that communication between the state residential schools and the college is inadequate, that the schools are not given concrete information regarding Gallaudet's admission standards, and that the schools cannot obtain from the college suggestions on curriculum improvement in order that they may better prepare their students for entrance to Gallaudet.

Conclusions

The Role of Gallaudet College

Careful consideration has been given to the questions that have been raised with respect to the liberal arts role of Gallaudet: (1) whether a liberal arts college for the deaf serves a useful purpose and (2) whether in fact Gallaudet is such a college. The question of the singular liberal arts role of Gallaudet College would probably not arise if there existed other institutions with programs offering alternate choices in the post-secondary education of the deaf.

The Committee has found that Gallaudet College is performing the functions of a liberal arts college and that, in terms of the program of the college, it is teaching at the collegiate level. Gallaudet is the only liberal arts college that can today effectively serve most deaf students and in so doing it performs a valuable, constructive function in the over-all education of the deaf.

The Committee believes that Gallaudet College should continue to refine and improve its status as a liberal arts college serving the deaf. It should not dilute its strength and quality by taking on additional academic burdens. Vocational and higher technical educational fields for the deaf should be left to others to develop. Gallaudet is known chiefly and favorably for its undergraduate program in the liberal arts. It would be unwise for the college to seek to expand that role.

The curriculum of the college is broad enough to meet the minimum requirements for a liberal arts college and for the completion of a major program in most of the fields commonly associated with the liberal arts. There is, however, little room for elective choices in the students' major fields.

The Committee also is concerned about the brief preparation new faculty members have for the specialized teaching assignments they are undertaking. These teachers need not only to develop proficiency in a new medium of communication--the language of signs--but also to gain insight and understanding of the educational deprivation which the students' handicap has imposed and continues to impose. The Committee has received remarkably consistent reports on the inadequacy of these specialized types of preparation from a wide variety of sources.

Expansion and Enrollment

The question of present size and future growth of Gallaudet College also turns to an important degree upon the creation of alternative programs in post-secondary education of the deaf, including the possible creation of special facilities for the deaf in colleges for hearing students. Those students whose previous educational experience has been in hearing schools should be encouraged to attend colleges for the hearing and the colleges should be encouraged to provide facilities and services to make their success there more likely. Undoubtedly, if vocational and technical training centers for the deaf become available at the post-secondary level, a significant number of those students who would otherwise apply for admission to Gallaudet College will choose to study in them.

Structure of Governance

The college has been fortunate in having on its board of directors men who have given freely of their time and talent out of a sense of selfless dedication to Gallaudet's program and development. The Committee believes, however, that since the college serves the nation, its board should be more nationally representative.

The board is also somewhat smaller than one would expect in a college of national scope. Aside from the public members prescribed by law or custom, there are only nine board positions.

The Committee does not look with favor generally on representational membership on boards of directors; individual interest and ability are usually more valuable assets in such posts. It is natural, however, for alumni to be deeply concerned about the fortunes of their colleges, and the Committee has been made aware of significant dissatisfaction among the organized alumni over the issue of their representation on the board. While no formal recommendation is proposed with respect to alumni representation, the board might be well advised in filling vacancies to consider able and interested alumni from time to time, without regard to whether such representation is prescribed or not.

Relations with Secondary Schools

The Committee concludes that the criticisms of the college for failing to maintain good relationships with secondary schools for the deaf fall in the area of subjective criticism not susceptible to objective resolution. The Committee's staff has discussed the matter with many school superintendents and finds the criticism far from unanimous. In many cases, the superintendents' only criticism on this score is made tolerantly, to the effect that word on admissions of individual applicants is received later than they would like. They acknowledge, however, that few admissions offices in colleges are completely up-to-date in their correspondence at the time when admission decisions are being made.

The Committee would not support the view that admission requirements should be stated in concrete terms of standard achievement scores, as has been suggested by some. Particularly in the case of the deaf, admissions decisions should be based on a more flexible approach, taking into account a variety of factors. This is a valid and humane approach, particularly since the college program offers the alternative of a preparatory year before the final decision on college admission is made.

Nevertheless, it seems likely that there is room for improving the understanding among secondary school officials of the actual admissions decision process. The college authorities should lose no opportunity to be sure that as full information as possible on both admissions and curriculum is made available to secondary school officials.

Recommendations

A review of the recent history of Gallaudet College cannot but impress the reviewer with the notable progress that has been made. The more obvious evidences are to be found in the improvements in buildings grounds; less visible, but of more significance, are the improvements faculty and curriculum which have made possible its accreditation by Middle States Association of Colleges and Secondary Schools. These ances reflect credit on the college leadership and on the Federal icials in both the Congress and the Executive Branch who have supported program.

There is still room for improvement, however, and the following ommendations are offered in the hope that they will prove helpful in process:

1. That the Federal Government continue to support Gallaudet College in its efforts to maintain and improve its status as a liberal arts college to serve the nation's deaf.
2. That the budget of Gallaudet College be increased in support of the following measures:
    a. An increase in the number of course offerings in the natural sciences and the social sciences to make possible a wider range of electives.
    b. A program of orientation that will permit new faculty members to devote at full pay at least three months to learning effective communication with the deaf and to achieving a deeper understanding of the educational deprivation which the students have inevitably suffered because of their handicap.
    c. A liberalized leave policy to encourage faculty members to pursue programs leading to the doctoral degree.
3. That any plans for future growth of Gallaudet take into account the possibility of more deaf students studying with special help in colleges for the hearing; and that, particularly if the recommendations of the Committee with respect to post-secondary education of the deaf are accepted and put into practice (see Chapter III), the college authorities proceed with particular caution in expansion planning until the recommended demonstration program has been evaluated, possibly raising its admission standards somewhat as a control on application pressures if they develop in the meantime.

4. That Public Law 420, 83rd Congress, be amended to increase the number on the board of directors to 20, that the board seek to elect new members from a broader geographical base, that all board members serve for fixed terms of perhaps 5 years, that the board strive to increase alumni representation, and that the president of the college serve as an ex officio, nonvoting member of the policy-making board.

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V. FEDERAL PROGRAMS

Primary responsibility within the Federal Government for activities and programs relating to the education of the deaf is located in the Department of Health, Education, and Welfare. Of the seven operating agencies which together constitute the Department, four administer programs concerned with the education of the deaf: the Office of Education, the Vocational Rehabilitation Administration, the Public Health Service, and the Welfare Administration. The activities and programs of these four agencies may be categorized as research and demonstration, professional preparation and consultation services, and support of direct public services.

In addition to the programs administered by these elements of the Department of Health, Education, and Welfare, other Federal agencies (notably the Department of Defense, Veterans Administration, National Aeronautics and Space Administration, National Science Foundation, and the Federal Aviation Agency) are sponsoring activities that may have important implications for the education of the deaf. They are stimulating and conducting basic and applied research on problems directly related to their assigned missions, but in each case there are research undertakings whose findings should be reviewed for by-products having implications for the deaf and their education.

Office of Education

The Office of Education is the agency within the Department responsible for most of the Federal activities involving the education of the deaf. Its programs are administered through two divisions of the Bureau of Educational Research and Development: the Division of Handicapped Children and Youth and the Division of Educational Research. The Division of Handicapped Children and Youth was established in October, 1963, in recognition of the need to have a focal point in the Department of Health, Education, and Welfare and in order to provide services in areas related to the education of handicapped children. The expanded scope and increased level of support of the Cooperative Research Program necessitated major organizational changes in 1964. The program is now administered through the several organizational units of the Division of Educational Research.

Division of Handicapped Children and Youth

Programs for the deaf are administered mainly through the following three branches of the Division of Handicapped Children and Youth: (1) Captioned Films for the Deaf, (2) Research and Demonstration, and (3) Physical and Sensory Handicaps.

Captioned Films for the Deaf. The initial act of 1958 authorized the establishment of a captioned film library and the distribution of these films to groups of deaf people on a loan basis. A recent amendment expanded the scope and objectives of the program to provide for research in the use of educational and training films for the deaf, training in the use of films for the deaf, and producing and distributing educational and training films. It also increased the annual appropriation authorization from $250,000 to $1.5 million.

This program has supported workshops of educators to develop curriculum materials in the areas of social studies and science. From these workshops came a comprehensive and acceptable instructional program incorporating captioned films in the teaching of subject matter. These films have proved to be valuable supplements to teaching course materials. Through support of similar workshops and research endeavors to improve captioning techniques, it is anticipated that even fuller utilization of captioned films will be made by registered deaf groups.

There are series of captioned films on deposit at some 55 schools and centers for the deaf well distributed throughout the country. Because of their geographical locations and related factors, some 15 state residential schools service only themselves from the libraries located at their schools. The other schools and centers service their own needs for captioned films as well as surrounding schools, classes, and other eligible groups. Four additional centers will be soon established in California to serve better the captioned film needs of the deaf in that area.

Support of research studies to expand and improve the use of captioned films is discussed more fully in the following chapter. In fiscal year 1964, total grant support of this type of activity amounted to $444,247 of which $224,882 was allocated for research to be conducted in the 1964 fiscal year.

Research and Demonstration Branch. The research and demonstration program of the Division of Handicapped Children and Youth was established in June, 1964. Through this program the Office of Education is able to make grants to states, educational agencies, institutions of higher learning, and other public or nonprofit educational or research agencies and organizations for research and demonstration projects on special education for handicapped children. The scope and nature of these research and demonstration activities are outlined more fully in the next chapter.

Of the 34 grants awarded for research and demonstration projects for the fiscal year 1964, 6 were awarded for specific research on problems of the deaf. Of the $2.6 million awarded and committed for the next 3 fiscal years, $223,000 (8 per cent) was committed for studies of the problems of the deaf.

Physical and Sensory Handicaps Branch. The programs of this branch provide educational services for children who are deaf, speech and hearing impaired, visually handicapped, and crippled or otherwise health impaired. In each of these areas of handicapping conditions, staff specialists administer programs of support for teacher training, conduct intramural research, and provide consultative services.

Until quite recently, there was a critical shortage of qualified teachers of the deaf. In 1961, Congress authorized scholarships and training grants to institutions of higher education to prepare more teachers of the deaf. The impact of this program is shown in the following tabulation:

Year	Number of Centers with Degree Programs	Number of Centers Participating in Federal Programs	Number of Teachers Trained
1959	22	--	129
1960	25	--	177
1961	31	--	231
1962	32	--	202
1963	47	43	470
1964	51	46	559

In the 1962-63 academic year, there were 43 participating colleges, institutions, and training centers and 370 scholarship recipients. The following year there were 46 participating institutions in 29 states and the District of Columbia and 427 scholarship recipients in attendance.

Of the 427 students participating in the 1963-64 program, 64 per cent were graduate students and 36 per cent undergraduates. More than 52 per cent came with prior training in the field of education, 17 per cent with hearing and speech preparation, and 30 per cent with a liberal arts background.

In the 1963-64 academic year, scholarships totaling $1.3 million were awarded and training grants approximating $450,000 made to schools and universities.

Available projections of needs for teachers of the deaf indicate that the current program has reduced the critical shortage of teachers of the deaf; yet in the fall of 1963, 761 teachers were needed and only 352 newly trained teachers were hired. There are current reports of newly trained teachers having difficulty finding positions and other reports of desperate teacher shortages. This apparent anomaly can probably be attributed to inadequate salaries in many jurisdictions, immutable geographical preferences on the part of some teacher candidates, and, in at least a few cases, the admission to the program in a period of rapid expansion of some students with borderline qualifications.

In 1964, an amendment broadened the scope of the program to provide assistance in the training of supervisors of teachers of the deaf. It is hoped that this new authority will be translated into the alleviation of a critical shortage which is developing in schools and classes for the deaf and that well-trained and experienced supervising teachers will be available to give effective leadership in this difficult educational field.

Division of Educational Research

The Cooperative Research Program was established in 1956 for the purpose of developing new knowledge about major educational problems and devising new applications of existing knowledge for solving educational problems.

The division supports research activities through the use of contracts or jointly financed cooperative arrangements with universities, colleges, and state educational agencies. It has a broader research charter than the Division of Handicapped Children and Youth, and the proportion of its resources devoted to problems of education of the deaf is naturally smaller. The research undertakings in this field make up a significant portion of such research, however. They are discussed in more detail in the following chapter.

The Title VII program of the National Defense Education Act of 1958 is also administered by this division. Through this program the Office of Education conducts, assists, and fosters research and experimentation in the more effective utilization of television, radio, motion pictures, and related media for educational purposes. Support may also be provided for the training of teachers in the use of such media.

Vocational Rehabilitation Administration

A second major agency within the Department of Health, Education, and Welfare concerned with the education of the deaf is the Vocational Rehabilitation Administration. The original mission of this agency was considered to be primarily the training of workers injured in industry; however, since its inception in 1920, the mission has been expanded to include the treatment, training, and acquisition of employment for all of the disabled, whether physically or mentally handicapped.

Both the research and program service areas of the Vocational Rehabilitation Administration program have major impacts upon problems of educating the deaf. The impact and extent of the research program are discussed in the following chapter.

The Vocational Rehabilitation Administration program provides matching grants to states to assist them in meeting the costs of providing rehabilitation services to the physically and mentally handicapped and in initiating projects for the expansion, extension, and improvement of rehabilitation services. Grants are made directly to public and other nonprofit organizations and agencies to assist in meeting the costs of projects for research, demonstrations, training and traineeships, and related special projects which may contribute to the solution of vocational rehabilitation problems.

Consultative services are given the states on a continuing basis by VRA's regional representatives. Technical and professional assistance is provided in the establishment of standards; preparation, amendment and approval of state plans; determinations of disability of individuals applying for benefits; and the certification of Federal grants-in-aid for support of research, demonstration, professional training, and related activities.

Though programs may vary from state to state, rehabilitation services generally include: (1) diagnostic services incidental to the determination of eligibility and the nature and scope of rehabilitation services to be provided; (2) academic, vocational and on-the-job training, employment guidance and job placement, and follow-up services; (3) in cases of individual financial need, necessary medical, surgical, psychiatric, and hospital treatment and prosthetic devices, goods and services necessary to enable the individual to engage in a remunerative occupation; and (4) the establishment of public and nonprofit rehabilitation facilities and workshops.

Since 1955, there has been virtually a five-fold increase in VRA grants to state programs to support services to the deaf. In that year, some $400,000 was obligated for this purpose and it is estimated that in fiscal 1965 nearly $2 million will be obligated. During this same period funds for training and traineeships were increased from $5,000 to an estimated $579,000.

The states' programs for the deaf are organized to enable them best to deal with placement problems within each particular state. In some states the majority of the deaf is educated at the public residential school, and in others most are educated in day schools and classes for the deaf. In order to accommodate these different needs, the state rehabilitation programs in such states as New Jersey, Georgia, and Louisiana have assigned qualified counselors to the state residential schools. Other states, such as Illinois, administer the rehabilitation and placement of the deaf through general centers and do not have counselors assigned specifically to the state residential schools. A general problem among state agencies is the shortage of counselors able to communicate effectively and easily with deaf clients.

The Committee was favorably impressed by the aggressive manner in which the Vocational Rehabilitation Administration is seeking to alleviate this situation as well as by its support of research and other activities bearing on the education of the deaf.

Welfare Administration

The Welfare Administration is not directly involved in the education of the deaf, but certain activities of its Children's Bureau play an important part in reinforcing educational programs. In its activities designed to promote the health and welfare of children, the bureau provides stimulation and support of programs and services for children who are deaf or who have a severe hearing impairment. These programs include the early identification of children who are or who may become deaf, parental education, preschool training, and the provision of medical, surgical and hospital care, audiological services, hearing aids and other prosthetic devices. Support is also provided for research and demonstration studies seeking ways to reduce otological and other abnormalities which lead to deafness, as well as to improve diagnostic techniques, equipment and procedures and to increase the number of trained professional and technical personnel and assist them to render more comprehensive and effective services to children with handicapping problems.

The Bureau's Division of Health Services makes grants to state agencies to assist in extending and improving services to crippled children. Grants are made to provide necessary facilities as well as medical, surgical, corrective, and related services and care for children who are crippled or are suffering from conditions that may lead to crippling. Consultation is provided to the state agencies on methods, procedures, and programs for the early case finding, diagnosis, and medical treatment of crippled children as well as the development, extension, and improvement of programs for the care of children. Through state crippled children's programs, deaf children are able to receive diagnostic, medical and surgical care, and related services, as well as hearing aids and other appliances.

Public Health Service

Although most programs and activities of the Public Health Service are medically oriented, several of them are clearly of interest to educators of the deaf. These include not only such activities as the stimulation and support of hearing and speech centers and the training of professional people, but also the conduct and support of research activities in the area of neurological and sensory diseases. Significant medical, surgical, and clinical breakthroughs could alleviate the handicap of deafness itself. The research and related activities of the National Institutes of Health, specifically programs of the National Institute of Neurological Diseases and Blindness, the National Institute of Child Health and Human Development, the National Institute of Mental Health, and the National Institute of Dental Research, in the area of neurological and sensory diseases and defects provide insight into fundamental processes which have application to the problems of the deaf and their education.

The Bureau of State Services has within it a Neurological and Sensory Disease Service Branch, whose program objectives are to aid states and communities to develop, establish, and maintain effective services and programs for the prevention, treatment, and control of neurological and sensory diseases. An important objective is to stimulate, support, and coordinate applied extramural research studies and investigations which may lead to practical application of knowledge in the neurological and sensory disease field. Support and sponsorship is given to hearing and speech centers, professional training programs, institutes, workshops, seminars and related activities designed to make health personnel and programs more effective at the community level.

The research and demonstration activities of the National Institutes of Health and the Bureau of State Services of particular interest in the education of the deaf are described more fully in the following chapter.

Gallaudet College

It should be noted here that the Secretary of Health, Education, and Welfare has important responsibilities in connection with the support and management of Gallaudet College, as detailed in Chapter IV.

Program Coordination

All Federal programs primarily concerned with the education of the deaf are within the Department of Health, Education, and Welfare and, with the exception of the service to deaf persons by the Welfare Administration and Vocational Rehabilitation Administration, are now administered by the Bureau of Educational Research and Development of the Office of Education. The programs, activities, and budgets of Welfare Administration and Vocational Rehabilitation Administration are reviewed, analyzed, and coordinated through the Office of the Secretary of Health, Education, and Welfare.

The research and demonstration programs of the National Institutes of Health and the Bureau of State Services are administered through the Public Health Service. These research activities are screened, reviewed, approved, and coordinated through the Division of Research Grants and its advisory panels of nongovernmental scientists. The budget of the Public Health Service is reviewed, analyzed, and coordinated through the Office of the Secretary of Health, Education, and Welfare, as are the budgets of Gallaudet College and the Office of Education.

Aside from the program and budget review, there is no focal point of coordination of the several ongoing activities directly involving or relating to the education of the deaf once the programs have been approved and funded. This is not to say that each element of the Department goes its independent way. The officials of the Office of Education concerned with the administration of programs for the education of the deaf meet periodically to discuss mutual program needs and objectives as well as to receive requests for support of research and demonstration projects. Informal meetings, conferences, and discussions are held by staff members.

Occasionally projects involve all of the Federal agencies concerned even remotely with the education of the deaf, and on these occasions an opportunity is created for all to get together for discussion. There is, however, no single focal point of assigned responsibility for systematically keeping in touch with progress in the several programs, for assessing progress and problems, and for assuring that all programs are proceeding in constructive harmony with each other

Conclusions

There is a need for a new, forward-looking approach to the education of the deaf, and the Federal Government is in the best position to furnish it. Changes are taking place in the field of education generally; there is a new and exciting emphasis on programs of special education; rapid technological advances are taking place; progress in medical and paramedical research and service has been remarkable--but the field of education of the deaf has not generally been alert to opportunities to apply these advances, where applicable, to the alleviation of its problems. Ways must be found to achieve more effective communication between educators of the deaf and others whose achievements may be of benefit to deaf children.

The education of the deaf requires, to a greater extent than most fields of education, the close cooperation of several disciplines--education, psychology, audiology, otology, and sociology. The Federal Government has an important commitment to support the over-all effort. Its position gives it a natural opportunity to provide strong continuing leadership in coping with one of the most difficult educational challenges. If it is to perform this role adequately, it needs at a minimum to provide a focal point for continuing coordination of its own efforts and to create a facility for the regular assessment of progress and of emerging problems.

The Department of Health, Education, and Welfare is the natural locus of this responsibility, but it needs new approaches to the problems and specialized resources to accomplish the task. Recommendations to these ends are set forth below.

Recommendations

1. That a continuing national advisory committee on the education of the deaf be appointed by the Secretary of Health, Education, and Welfare. The responsibilities of this committee should include the following:

    a. Stimulate the development of a system for the gathering of information on a periodic basis in order to make it possible to assess progress and identify problems in the education of the deaf.

    b. Identify emerging needs and suggest innovations that give promise of improving the educational prospects of deaf individuals.

    c. Suggest promising areas of inquiry to guide the research effort of the Federal Government in education of the deaf.

    d. Advise the Secretary on desirable emphases and priorities among programs.

    Representation on the committee should be such as to provide an opportunity for each of the disciplines involved to make a contribution, as well as to enlist the efforts of educators both of the deaf and the hearing and of the deaf themselves. Representation should not be institutional, but individuals should be selected on the basis of their abilities to make constructive contributions in such a forum.

3

Most importantly, the committee should be expected to make creative contributions. It should not be permitted to become purely a watchdog of conventional programs.

2. That assistance be provided to the Secretary in carrying out his responsibilities for the coordination of the several educational and related program activities that have bearing upon the education of the deaf, both directly and indirectly. There are obviously a number of possible ways of accomplishing this, and the following suggestion is offered as one of many arrangements that could achieve the objective.

   It is recommended that there be within the Office of the Secretary a position recognized as primarily concerned with the education of the deaf. The responsibilities of the position should be clearly defined in order to avoid conflicts of authority within the Department. The following are suggested as desirable duties of the position:

   a. To serve as a focal point within the Department on all matters pertaining to the education of the deaf.

   b. To provide continuing liaison with the advisory committee on the education of the deaf.

   c. To maintain current knowledge of all programs within the Department affecting the education of the deaf either directly or indirectly, including programs for other groups of handicapped persons to which the problems of the deaf might be related.

   d. To participate in the review of pertinent proposed programs and budget requests.

   e. To maintain contact with institutions and associations concerned with overcoming the handicap of deafness, with particular regard to educational needs and proposals.

   f. To work cooperatively with all departmental units involved in education of the deaf.

An important concept to be incorporated in the position is that it is a staff position. The incumbent should have no authority to direct programs but should be prepared to use his good offices to assure that programs operate in harmony with each other and that they are mutually supporting. It should be understood by all that the incumbent works only with and through the established lines of departmental authority, and he should take great care to avoid any breach of this discipline.

The constructive promise of such a position is that there would be created a position calling for full-time attention to all aspects of the education of the deaf. This promise would be lost if the incumbent were to give reason for suspicion that the authority or responsibility of the several program officials were in any measure being undermined.

VI. RESEARCH

Selection of relevant research projects and sponsoring organizations to be included in this chapter has been difficult. It may be argued that any research, regardless of orientation, that is directed to the prevention or alleviation of a hearing loss or to improved ways to teach knowledge and to understand human learning processes is of profound interest to educators of the deaf. The first holds potential of abating, at least in the future, the need for special educational programs for the deaf. The second offers the potential of providing new knowledge, understanding, methods, and means by which language and subject matter may be introduced to normal and deaf children. However, for the purposes of this discussion only those research endeavors which are principally concerned with the educational problems of the deaf are presented.

There has been little support from private sources for such research. Only rarely have private philanthropic foundations, business concerns, and private organizations sponsored research in this field. The Federal Government has been regarded as the principal and proper source of support.

The total projected cost of federally supported current research in the education of the deaf amounted to about $1.6 million. Of this total, approximately $500,000 was to be spent in fiscal 1964.

Three major agencies of the Department of Health, Education, and Welfare encourage and support research in the education of the deaf: the Office of Education, the Vocational Rehabilitation Administration, and the Public Health Service. Of the 29 such federally sponsored research projects ongoing in fiscal year 1964, the Office of Education supported 16 projects with a total allocation of $758,567. The Vocational Rehabilitation Administration supported 8 projects with a total allocation of $643,469. The Public Health Service supported 4 projects with a total allocation of $214,064. The National Science Foundation accounted for the other project with an allocation of approximately $37,000.

Federal Support by Subject-Matter Area

Research supported by the Federal Government during fiscal 1964 can be classified under the following headings (the number of ongoing projects during the year in each category is shown in parentheses):

> Development and improvement of communicative skills and devices (14).
>
> Assessment and development of subject matter, curriculum, and educational programs (5).
>
> Conceptual learning and transfer in children and adults (4).
>
> Programmed instruction (2).
>
> Diagnostic and measurement studies (1).
>
> Audiology in education (1).
>
> General, which includes the assessment of film captioning techniques and the psychological status of deaf children as a function of parental attitudes (2).

Roughly one-half of the $1.6 million estimated total cost, or $870,431, was committed for support of 6 major research efforts of 2 to 5 years' duration. Five of the six research projects are primarily concerned with the development and improvement of language and communicative skills. The sixth major research study is in the area of assessment and development of subject matter, curriculum, and educational programs.

The Vocational Rehabilitation Administration is sponsoring two of the five major research studies in the area of language development and improvement. One is a five-year programmatic research study into problems of significance in the rehabilitation of deaf persons. The other is a study of psycholinguistic functioning in the deaf which appears to be related causally with difficulty in using flexible and creative thinking and expression. A three-year study of the psycholinguistic behavior of deaf children is being sponsored by the National Institute of Neurological Diseases and Blindness of the Public Health Service. The improvement of methods and facilities for teaching language to deaf children is another major research study in the language development area. It is supported by the Captioned Films for the Deaf Branch, Division of Handicapped Children and Youth of the Office of Education. Also being supported by the Office of Education is research to assess the role of the science of linguistics in the evaluation and improvement of techniques for teaching aurally-handicapped children. This three-year study is supported by the Basic and Applied Research Branch of the Division of Educational Research.

The sixth major research study identified is in the broad area of assessment and development of subject matter, curriculum, and educational programs. The Research and Dissemination Branch, Division of Handicapped Children and Youth of the Office of Education is sponsoring a three-year study to assess the value of a new program of instruction for deaf preschool children and their parents.

Development and Improvement of Communicative Skills and Devices

In fiscal 1964, 14 projects were supported at a cost of $290,183 in the development of language skills and language improvement devices. The research was conducted at centers, clinics, universities and colleges, schools for the deaf, and offices of professional and lay associations concerned with the education and welfare of the deaf. The periods of operation for these projects vary from less than one year to six years. Three projects were for periods of one year or less, three for a duration of two years, six for three years, and one each for five and six years' duration.

In addition to the five major research studies mentioned previously, nine other projects were identified as primarily concerned with the development and improvement of language and language devices.

The Vocational Rehabilitation Administration is continuing support of an investigation of those determinants of ability in deaf people which seem critical for the successful use of visible speech electronic equipment as a training aid for speech improvement. The VRA also supports a six-year study of the communicative structure patterns in deaf children.

The National Science Foundation is sponsoring a two-year study of the phonemic identification and the reproduction of speech sounds.

The Office of Education is supporting six research studies in this category. The Research and Demonstration Branch of the Division of Handicapped Children and Youth is supporting a study of how young deaf children communicate with others and how different environments influence the development of gestures, natural signs, speechreading, and speech; a project to develop and test new methods of teaching lipreading to the deaf through the use of visual aids such as films; and one to develop and evaluate the effectiveness of instructional materials for the deaf, structured to emphasize the syntactical meaning of words. A study of the teaching of rhythmic speech to deaf children is being sponsored through the Captioned Films for the Deaf Branch.

The Division of Educational Research, through its Media Research and Dissemination Program, is supporting the development of a filmed program for teaching the manual alphabet to the deaf; and, through its Basic and Applied Research Branch, a study to develop new methods of language development and improvement for use by the deaf, specifically deaf children from three to seven years of age.

Assessment and Development of Subject Matter, Curriculum, and Educational Programs

Five research studies in this area were supported with allocations of $82,912 in fiscal 1964. The Research and Development Branch of the Division of Handicapped Children and Youth supported three studies. In addition to the major study discussed previously, it sponsored a project for the development of a sex education curriculum for a state residential school for the deaf. It has also sponsored a project which developed a communication abilities test to measure a deaf child's ability to communicate and which has been standardized on a representative sample of deaf children. The Basic and Applied Research Branch of the Division of Educational Research is supporting a study to determine the relationships between early manual communication and later achievements of the deaf, particularly in the language arts area.

The Public Health Service, Neurological and Sensory Diseases Service Branch is supporting a project to evaluate, on the basis of standardized tests of psycholinguistic abilities, spectographic analyses and related factors, the relative value of a home training program for deaf infants between the ages of 7 and 42 months.

Conceptual Learning and Transfer in Children and Adults

Investigations in this category deal mainly with the conceptualization processes, abstract thinking, and the learning processes of deaf children and adults to determine how the processes parallel and are dissimilar to those of hearing persons. Allocations for work in fiscal 1964 totaled $34,145. One project being supported by the National Institute of Child Health and Human Development is principally concerned with problem-solving abilities and processes in deaf and hearing children. The Vocational Rehabilitation Administration is sponsoring investigations into the development of nonverbal concept learning tasks for deaf adults and the learning and transfer processes of the deaf with particular reference to time and space conditions related to discrimination and concept learning. The VRA is also sponsoring a project to investigate the conceptual abilities of the deaf required to deal with social and emotional stimuli as related to the development of these abilities in hearing persons.

Programmed Instruction

An investigation to determine the relative value in the use of visual and programmed instruction for teaching beginning reading to deaf children is being supported under the Title VII program of the National Defense Education Act of 1958 and administered through the Media Research and Dissemination Program. The other study, sponsored by the Basic and Applied Research Branch, is designed to evaluate relative achievement gained from use of programmed texts of high school mathematics as used with deaf children.

Diagnostic and Measurement Studies

The Vocational Rehabilitation Administration is supporting a $40,000 study to revise a nonverbal test of learning aptitude. This test was designed particularly for the deaf and others with communication problems.

Audiology in Education

The Office of Education, through its Basic and Applied Research Branch, has granted $62,000 for a study designed to determine whether or not the educational audiology method aids in the development of speech and language of the hearing impaired child to the extent that he might be integrated into normal hearing classrooms.

General

Included in this category are two other educationally oriented research projects. Approximately $33,000 was allocated in fiscal 1964 to support these projects. A study to field-test captioned programmed lesson films to teach key punch operations is being sponsored through the Captioned Films for the Deaf Branch. The National Institute of Neurological Diseases and Blindness is supporting a project to determine the psychological status of deaf children as a function of parental attitudes.

Conclusions

For a hundred years, many claim, emotion has substituted for research in attacking problems in the whole field of education of the deaf. The classic controversies in the field have tended to push into the background the spirit of free inquiry. Preoccupation with one point of view or another has tended to stifle the objectivity essential to true research.

There is a need for a bold new approach to the problem--one characterized by openmindedness and a willingness to see the education of the deaf not as an isolated problem, but as one which has much in common with the learning problems of other groups of handicapped persons. If the education of the deaf calls for a multidisciplinary approach, research into the problems of the field demands even more that many disciplines be enlisted in the search for answers that have been so elusive.

A review of the present federally-supported research efforts in the problems of the education of the deaf leads the Committee to the following conclusions:

1. There is need for greater focus and planning in order to systematize the research needs of the field.

2. Most of the present activity is made up of scattered and unrelated individual projects. In a field of tremendous complexity, with many difficult problems remaining to be solved, a field in which the contribution of many disciplines is needed, all but a few research grants are made for specific research endeavors on an individual project basis.

3. In view of the requirement for multidisciplinary research in problems of the education of the deaf, there is a need for two or more research centers, preferably in university settings, where the talents of the several related disciplines can be drawn upon, and where a stable, continuing program of research can be anticipated.

4. At least partly because of the lack of such research centers and continuing programs of research, relatively few able people are being attracted to a career of research in this field.

5. Possibly the most significant problem in the education of the deaf is that of finding more effective ways of teaching language and communication to very young deaf children.

6. Among the other problems deserving attention are: (a) the fuller use of programmed instructional material in education of the deaf; (b) the development of diagnostic, predictive, and assessment tests which are more suitable for deaf students; (c) the development of data and information dealing with the conceptual learning and transfer processes between teacher and student; (d) the development of improved diagnostic, prediction and measurement instruments, and longitudinal or retrospective analyses which might indicate the relative advantages and disadvantages and the optimum grouping of various educational environments for deaf children (i.e., residential schools, day schools, special day classes, integrated classes, etc.).

7. There is a need to develop basic, agreed-upon tools and standards of measurement for research in this field.

8. There is a need for increased Federal support of research into problems of the education of the deaf.

Recommendations

There is no quick and easy solution to the problems of establishing a comprehensive and effective research effort into the complexities of the education of the deaf. The basic requirements are that the problem be recognized as complex, that it requires broad programs that utilize a multidisciplinary approach, and that the intent of the Federal Government to support substantial and continuing research be made known.

To this end, the Committee recommends:

1. That the Division of Handicapped Children and Youth, Bureau of Educational Research and Development, Office of Education, be designated by the Secretary of Health, Education, and Welfare as the central point of focus and planning for Federal research efforts in the education of the deaf.

2. That a panel be convened to develop a proposed program of comprehensive research into the problems of education of the deaf; and that, subject to the panel's concurrence, such proposal contemplate major emphasis on programmatic research utilizing a broad multidisciplinary approach and involving support of two or more research centers, preferably in university settings.

3. That the panel be furnished, for the above purpose, necessary full-time staff assigned the sole responsibility of serving the panel in its initial identification and planning endeavors; and that funds be made available to the panel to permit it to enlist the aid of consultants as it deems necessary for this purpose.

4. That the panel invite the cooperation of other elements of the Department which support research related to or in the education of the deaf.

5. That the panel take note of the several unmet needs set forth in the Conclusions above in developing its plan.

6. That the proposed program developed by the panel not be constrained by budgetary considerations, but that it represent the combined judgment of the panel on the scope and emphasis of the program and on the level of effort needed; and that it be phased in accordance with the probable increase in competent research personnel attracted to the field.

7. That the panel specifically consider the desirability of a federally supported program of research and fellowship grants as a method of attracting competent young people to the area of research in the education of the deaf.

APPENDICES

A. Special Study of the Education of the Deaf Statement of Problem and Study Objectives

B. Historical Background--Education of the Deaf

C. Observations of Programs for the Education of Hearing Impaired Children in Five Countries in Europe

D. Summary of Selected Data Submitted by Schools and Classes for the Deaf

Appendix A

SPECIAL STUDY OF THE EDUCATION OF THE DEAF STATEMENT OF PROBLEM AND STUDY OBJECTIVES[1]

I. Statement of the Problem

There is a need to determine the best means of meeting the educational needs of the deaf so as to prepare this handicapped group to play a more active role in society in the decades ahead and to permit each deaf person to develop his talents to the limit of his capacity, thus enriching not only his own life but also providing additional scarce skills required for the Nation's economic growth and cultural advancement. Some circumstances highlighting the need for this study are:

> Present educational opportunities for the deaf are relatively restricted, and the average deaf student is generally ill-equipped to undertake higher educational programs. For example, most students entering Gallaudet College are required to take a one-year remedial program that provides a transition between the programs offered at the secondary level for the deaf and the freshman courses at the college.
>
> Furthermore, it has been stated that the proportion of deaf students attending college is much lower than the proportion of hearing students.
>
> Although graduates of schools for the deaf and Gallaudet College are increasingly entering new professions and lines of endeavor, it is not clear that avenues of career advancement now open, or likely to open in the near future, are commensurate with the potential abilities of the individuals concerned and the needs of society for an ever larger pool of skilled manpower.
>
> The problem is to recommend changes in policies and programs that will help overcome present deficiencies in educational programs for the deaf in this country, changes which will assist the deaf to exploit their individual potentialities to the fullest and, in the process, enable them to contribute more fully to our national objectives.

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[1] Furnished to the Committee at the start of its study by the Secretary of Health, Education, and Welfare.

II. Advisory Committee

The Secretary of Health, Education, and Welfare has appointed the following as an Advisory Committee on the Education of the Deaf:

Dr. Homer D. Babbidge, Jr., Chairman
President, The University of Connecticut
Storrs, Connecticut

Mr. LeRoy Duning
Cincinnati, Ohio

Dr. G. Franklin Edwards
Professor of Sociology
Department of Sociology and Anthropology
Howard University
Washington, D. C.

Dr. Winfred L. Godwin, Director
Southern Regional Education Board
Atlanta, Georgia

Dr. Miriam Pauls Hardy
Associate Professor of Otolaryngology
The Hearing and Speech Center
The Johns Hopkins Hospital
Baltimore, Maryland

Dr. LeRoy D. Hedgecock
Consulting Audiologist
Mayo Clinic
Rochester, Minnesota

Mr. Robert Lankenau
Akron, Ohio

Dr. Edgar Lowell, Administrator
John Tracy Clinic
Los Angeles, California

Dr. James A. McCain, President[2]
Kansas State University
Manhattan, Kansas

Dr. Kenneth E. Oberholtzer
Superintendent of Schools
Denver Public Schools
Denver, Colorado

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[2] Dr. McCain found it necessary to withdraw from the Committee on June 1, 1964.

Dr. Margaret Hall Powers, Director
Bureau of Physically Handicapped Children
and Division of Speech Correction
Chicago Board of Education
Chicago, Illinois

Dr. J. R. Rackley
Vice President for Resident Instruction
The Pennsylvania State University
University Park, Pennsylvania

In addition, Public Administration Service, a nonprofit consulting service to governments, has been engaged to furnish staff assistance to the Committee in the conduct of the study and preparation of the report, which is to be completed by January 20, 1965.

III. Objectives of the Study

The objective of the survey is to produce recommendations to guide Federal and non-Federal program planning and policy development in the field of the education of the deaf. The conclusions and recommendations as embodied in the final report should be useful not only to Congress and the Executive Branch in determining appropriate levels of support and assessing new program activities at Gallaudet College and various other educational programs for the deaf administered by the Department of Health, Education, and Welfare, but they should also provide a guide to the Federal, State, and local governments, voluntary agencies, and individuals in developing and critically assessing new policy and program proposals.

IV. Scope of the Study

The views of the Committee are particularly desired on the points listed below, and study emphasis should be placed upon them.

1. A study of the quality and scope of education for the deaf currently offered at the elementary and secondary levels, together with recommendations for the improvement of these programs.

2. A determination of what types of persons with severe hearing loss can best be served by specialized educational programs for the deaf at the elementary, secondary, and college levels and what types of persons could profit from instruction in regular schools and classes at various stages in their education. If present methodology is not sufficiently advanced to permit such a determination to be made, the report of the study group should suggest what steps might be taken to provide the factual and conceptual bases required for such a determination.

3. An evaluation in depth of the current admissions policies at Gallaudet College. Attention should be given to the question of whether the minimum standard should be raised, lowered, or left as it currently is; this point will relate closely to the recommendations made on the preceding two points.

4. A judgment of the types of courses and programs of study which should be made available at the post-high school level through Gallaudet College or some other institution to assure that the maximum possible opportunities are afforded to deaf students to exploit their intellectual and other skills. This aspect of the study should investigate not only current and potential offerings at the college but also the need for, and feasibility of, establishing junior college, technical institute, or other programs to provide a full range of courses of study.

It is recognized that strictures of time and funds limit the depth of the study. The report should therefore reflect the Committee's judgmen as to whether the study it has been possible to make represents an adequat basis for program and policy determination in all respects. If further studies in depth are required on any of the points, the views of the Committee on the nature of such studies will be welcomed.

Appendix B

HISTORICAL BACKGROUND EDUCATION OF THE DEAF[1]

Up until the 16th century, the deaf were considered uneducable, partly due to pronouncements attributed to Aristotle that those who are born deaf become senseless and incapable of reason. There is reason to believe that Aristotle was misinterpreted; nevertheless, due to the influence of his writings which were accepted without question for hundreds of years there are few recorded attempts to teach the deaf until the 16th century. In that century, Aristotle's pronouncements were upset by the writings of an Italian physician, Girolamo Cardano, who maintained that the hearing of words was not necessary for the understanding of ideas. In one of his works he stated that the deaf could be taught to read and write by learning to associate the printed word with the object for which it stands. Although Cardano elaborated a code for teaching the deaf to read, there is no evidence that he ever attempted to use it. His major contribution was dispelling the attitude that the deaf were dumb and, therefore, could not be educated.

It was Spain which apparently produced the first teachers of the deaf. In that country, those who were born deaf and mute were legally prohibited from rightful inheritances. This led to attempts by noblemen to have their deaf sons educated and taught to speak so the sons could claim their inheritances and manage their own affairs. The first recorded person to undertake this task was Pedro Ponce de Leon, a Spanish monk, who was born in 1520 and died in 1584. He is reputed to have educated the deaf children of several noble families of Spain to the extent that the children were declared legally qualified to inherit their families' estates. What records we have indicate that Ponce de Leon first taught reading and writing by associating objects with the printed word. Speech was then taught by associating movements of the vocal organs with the printed characters. Unfortunately, Ponce de Leon's work died with him and we have no direct or detailed records of his methods and results.

Spain not only produced the first teachers of the deaf, it also produced the first complete book on the education of the deaf. The book was written by Juan Martin Pablo Bonet and appeared in 1620. In this book, Simplification of Sounds and the Art of Teaching the Dumb to Speak, Bonet described the methods by which he taught the deaf children of several Spanish noblemen. Bonet advocated the teaching of a one-handed manual alphabet as the first step in the education of a deaf child.

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[1] Prepared for the Advisory Committee on the Education of the Deaf by Dr. Stephen P. Quigley, Associate Professor for Special Education, Institute for Research on Exceptional Children, University of Illinois.

Finger and hand positions were associated with the printed letters of the alphabet so that the child was learning to read at the same time as learning finger spelling. Following this, the child was taught speech by associating positions and movements of the vocal organs with the printed letters. Teaching progressed from syllables to words to sentences.

The one-handed manual alphabet advocated by Bonet in 1620 is essentially the same as that in use in the United States today. The educational method of associating finger spelling, speech, and the printed word which was used by Bonet is similar to the Rochester Method used in this country and to the method used by the Russians in their recent experiments with teaching language to deaf children. Thus it can be seen that the most recently advocated method for teaching the deaf in the United States and in Russia has its roots in the work of Bonet almost 350 years ago. How effective the method was in Bonet's time we do not know. How effective it is, or might be, in our time we do not know either.

While Spain gave us our first teachers of the deaf and the first book, it was in France and Germany that public education for the deaf really began; and it is in those two countries that the roots of our present types of schools and communication methods lie. It was there that the controversy between oral and manual methods of teaching deaf children began and flourished in the work of two great figures in the education of the deaf--Abbé Charles Michel de l'Epée of France and Samuel Heinicke of Germany. Their work paved the way for general public education of the deaf throughout the world but also established a controversy which remains unresolved to this day.

The Abbé de l'Epée founded the first public school for the deaf in 1755 in Paris. His chief concern was to provide the education for religious instruction of the deaf which he believed necessary for the salvation of their souls. Besides being considered the father of public education for the deaf he also is considered as the father of the language of signs.

De l'Epée became convinced early in his teaching that the language of signs was the natural language of deaf people and that their education should be based on it. He recognized, however, that the signs and gestures normally used by deaf people as a means of communication were too crude and restricted to serve as an educational tool, and so he set himself the task of refining and expanding these signs in an attempt to develop them into a full language. The elaborate system of signs which he developed and the methods by which he used them as the basis for educating the deaf are described in two books which he wrote: Instruction of Deaf and Dumb by Means of Methodical Signs; and The True Manner of Instructing the Deaf and Dumb, Confirmed by a Long Experience.

Like Bonet, de l'Epée began instruction by teaching a manual alphabet. Objects then were associated with the printed word and with the word spelled on the fingers. Teaching proceeded to the use of signs to denote objects and ideas: signs being faster than finger spelling, and according to de l'Epée, the mother tongue of the deaf and their natural vehicle for thought and the expression of ideas. Speech and lipreading also were taught but were regarded by de l'Epée as not worth the time and effort required to teach them to the deaf. The Abbé, who was born in 1712, died in 1789 honored throughout Europe for his work with the deaf. His memory still is honored by deaf people throughout the world.

While the Abbé de l'Epée was becoming known as the father of the French method (the language of signs), Samuel Heinicke was becoming known as the father of the German method (the oral method). Heinicke was born about 1727 and died in 1790. Thus his life span paralleled that of de l'Epée. Heinicke was a strong proponent of teaching the deaf through speech and speechreading. He considered spoken language to be the foundation on which the education of the deaf should be built and believed that thought was possible only through oral language. Apparently speechreading was taught first with the student learning to associate ideas with the movements of the speaker's lips. When this had been established speech was taught and then reading and writing.

Heinicke was strongly opposed to manual communication, believing it to be harmful to the educational progress of deaf persons. He engaged for many years in a bitter controversy with de l'Epée on the topic. The controversy culminated in a request by de l'Epée to the Zurich Academy that they review the correspondence between Heinicke and him and render a judgment on the relative merits of the methods. The Academy consented and tried to obtain further information on Heinicke's methods. This they were unable to do and so were unable to reach a decision. They declared that they thought de l'Epée's method was good because they had ample information to judge it but could not judge the method of Heinicke because of their inability to obtain adequate information on it.

At the time Heinicke and de l'Epée were engaged in their controversy over methods, Thomas Braidwood in England was establishing a school for the deaf and gaining fame through teaching speech to deaf students. The school prospered and was continued by other members of the family after the death of the founder. Some members of the family became involved in the education of the deaf in other schools in England including another Thomas Braidwood, grandson of the elder Thomas, who was appointed head of the Birmingham Institution for the Instruction of Deaf and Dumb Children. The younger Thomas Braidwood was destined to have a considerable influence on education of the deaf in the United States through his contacts with Thomas Hopkins Gallaudet who established the first permanent school for the deaf in the United States in 1817.

Thomas Hopkins Gallaudet, the father of education for the deaf in this country, was born in 1787. During his early career he studied law and theology and was a licensed preacher. In 1814 he became acquainted with Alice Cogswell, the daughter of a neighbor, Dr. Mason Fitch Cogswell, in Hartford, Connecticut. Alice Cogswell, who was born in 1805, became deaf at the age of two through cerebro-spinal meningitis as a result of which she eventually lost her speech. In 1815, Dr. Cogswell persuaded a group of friends and neighbors to contribute sufficient funds to send a teacher to Europe to study methods of educating the deaf with the goal of eventually establishing a school for the deaf in the United States. Gallaudet, who had become very interested in Alice Cogswell and had been attempting to teach her for several months, was selected to go to England and study the oral method of the Braidwoods. The Braidwood family and their method had become known in the United States through Francis Green of Boston who had taken his deaf son Charles to the Braidwoods to be taught by them. Green also had tried to encourage the establishment of a school for the deaf in the United States but his efforts failed.

When Gallaudet presented himself to Thomas Braidwood, the younger, it was with the intention of studying the Braidwood method for a few months and then studying with the Abbé Roch Ambroise Cucurron Sicard who was appointed director of the school in Paris following the death of the Abbé de l'Epée. Gallaudet intended to combine the best of the methods of Braidwood (oral) and Sicard (manual) for educating the deaf in the United States. This was unacceptable to the Braidwoods who proposed that Gallaudet study their method for three years in the school for the deaf in London which was headed by Joseph Watson, a nephew of the elder Thomas Braidwood.

At about this time, the Abbé Sicard arrived on a lecture tour in London with two of his most famous pupils, Jean Massieu and Laurent Clerc. Gallaudet was so impressed with the demonstrations of these pupils that he abandoned negotiations with the Braidwoods and travelled to the school in Paris to study with Sicard. After studying the French method for a few months, Gallaudet returned to America bringing with him Laurent Clerc who was destined to be the first deaf teacher of the deaf in the United States. After overcoming the usual problem of obtaining money, Gallaudet succeeded in establishing the school in Hartford, Connecticut, which became the forerunner of the system of state residential schools in this country.

There has been much speculation as to what direction the education of the deaf in the United States might have taken if the Braidwoods had been less secretive about their methods and permitted Gallaudet to study them. The speculations are interesting but fruitless. The fact remains that the French method of manual communication was the first imported into the United States and predominated for more than 50 years before oral schools were established to challenge it. Gallaudet's study with Sicard also resulted in the establishment of the tradition of the deaf teacher of the deaf. Since the employment of Laurent Clerc at the old American Asylum for the Education and Instruction of the Deaf and Dumb, many hundreds of deaf persons have themselves taught the deaf and deaf teachers now are employed in most state residential schools in this country.

Thomas Hopkins Gallaudet died at Hartford in 1851. Statues showing him teaching the letter A of the manual alphabet to Alice Cogswell are on the grounds of the American School for the Deaf at Hartford and at Gallaudet College which is named after him. Of greater honor to his accomplishments than monuments, however, is the obvious reverence in which he is regarded by most deaf people throughout the United States.

During the next 50 years, residential schools for the deaf were established in many states and modeled after the school in Hartford. Manual methods of instruction were used almost exclusively in the education of the students. This was an almost unbroken pattern until the establishment of the Clarke School for the Deaf in 1867 in Northampton, Massachusetts. This school used the German method of oral instruction only and to this day is one of the foremost proponents of the oral method. Interest in the German method which eventually led to the establishment of the Clarke School was aroused in this country in 1843 by Horace Mann and Samuel Gridley Howe, Director of the Massachusetts School for the Blind.

In 1843, Mann and Howe visited schools for the deaf in Germany and were impressed by the speech and lipreading ability of the children. Upon their return to the United States, they published an enthusiastic report on the oral method which aroused the interest of a number of parents of deaf children. The interest aroused in oral communication for deaf children led to the private oral teaching of the deaf children of several families near Boston, among whom was Mabel Hubbard, the daughter of Gardiner Green Hubbard.

In 1864, Hubbard and Howe petitioned the Massachusetts General Court for an act to incorporate an oral school for the deaf in the state. The petition was denied due to the opposition of the school at Hartford which sent students to demonstrate its claims of superiority of the French method of manualism over the German method of oralism. In 1866 Hubbard tried again. Again, the bill apparently would have been defeated; however, an accident of fate occurred which added a new dimension to the education of deaf children in this country. As the bill faced defeat, Governor Bullock of Massachusetts received an offer of $50,000 from a man named John Clarke to help establish an oral school for the deaf at Northampton, Massachusetts. This offer, and a convincing demonstration of oral teaching by Harriet Rogers of Chelmsford, Massachusetts, convinced the Massachusetts legislature to pass the bill. The school was established in 1867 at Northampton, Massachusetts, with Harriet Rogers as its first principal. It quickly became, and remains, one of the strongest forces for oralism in the world.

The French method now was challenged by the German. Gradually, although after much opposition, most schools for the deaf began to incorporate oral methods of teaching in their curricula. The system of state schools, however, did not become completely oral. While they instituted oral methods for most children in their first years in school, they provided manual classes in the later years for those children who seemed not to benefit from oral instruction. This combination of the German and French methods led to what is now called the combined system where oral and nonoral classes are available within a single school.

The Clarke School retained one feature of the state system of schools--it was a residential school. This pattern of schools for the deaf was broken in 1869 when the Boston School for Deaf-Mutes, later the Horace Mann School, was opened as a day school. It set the pattern for the 15 or so day schools which now exist in the United States. It is likely that residential schools were not so much an import from Europe as a matter of simple economics and practicality. In order to have enough deaf children in one place to provide for the homogeneous grouping necessary in a school, children had to come from considerable distances and residential schools thus became inevitable. This pattern was broken first in the large cities like Boston where enough children were available within a limited distance to permit the institution for the deaf to be a day school.

The next innovation in the education of deaf children took place around the turn of the century when day classes were established in Chicago. The aim of the program was to avoid gathering numbers of deaf children in one place and segregating them from the hearing community whether in residential schools or large day schools. The eventual goal was integration of deaf children into classes for hearing children and thus into the general community of hearing persons. This remains the goal of day class programs which now have spread throughout the country and number some 300 classes with about 9,000 students. Day classes in the United States also have historical antecedents. Johann Baptist Graser (1766-1841) of Germany maintained that a great deficiency in the education of the deaf was its isolation from the mainstream of society. At his urging, classes for deaf children were made a part of the public school systems in many German states. The teachers of the children were first trained in teaching nonhandicapped children and then trained to teach deaf children on the premise that an understanding of the development and teaching of the normal child was necessary before one could successfully undertake to teach the deaf. This is a philosophy which still prevails in day class programs in this country. In Germany, the experiment was attempted with great enthusiasm; however, it soon became evident that the much slower acquisition of knowledge by the deaf made integration with hearing students impractical in most cases. The experiment was abandoned about 1830.

The major contributions of the 20th century to the education of the deaf have come from medicine and technology. Early schools for the deaf contained many children whom we now would classify as hard of hearing. Many of these were children who suffered hearing losses through diseases which now are medically reversible. The great advances in middle ear surgery in our times have eliminated many of the cases of adventitious deafness which once were found in schools for the deaf. The use of antibiotics has helped eliminate the secondary effects of hearing loss which formerly resulted from such diseases as scarlet fever.

In technology, the hearing aid, which was one result of the early work of Alexander Graham Bell in the electrical transmission of sound, has enabled many children once educated in schools for the deaf to become oriented toward the world of sound and to be educated with hearing children.

Much of the credit for emphasizing the importance of medical and technological contributions to the education of the deaf belongs to Dr. Max A. Goldstein, a noted otologist, who founded the Central Institute for the Deaf in St. Louis, Missouri, in 1914. In this school Goldstein attempted to devise methods and apparatus which would make the fullest possible use of any residual hearing remaining to the students. His work was influenced by his contacts with Victor Urbantschitsch in Vienna, who was pursuing a similar approach to teaching deaf children. Since its founding, the Central Institute has been in the forefront, both in research and teaching, of the movement to understand and use residual hearing. Its emphasis on this aspect of education led to the establishment of the acoustic method. This no longer exists as a separate method since its basic principles and techniques for utilizing residual hearing through hearing aids and auditory training have proven of such value they have been incorporated into the oral method.

These, then, are the major historical antecedents of our present system of education for deaf children in the United States. The use of finger spelling and its combination with speech, known as the Rochester method in this country, can be traced to the work of Bonet in the early 17th century. The language of signs was imported from France by Gallaudet and was later challenged by the oral method of Germany as used in the Clarke School in America. Our day school and day class systems have their origins in the philosophy of Graser which was prominent in Germany about 1820. The major contributions which seem to be largely our own are the medical and technological contributions of this century.

Not only can the types of educational environments and methods of instruction be traced to beginnings in Europe--so also can the controversies arising from differences of environments and communication methods. These controversies, especially that of methods, were as bitter in this country in the early years of educating the deaf as they were in Europe. This no longer seems to be true. Although the differences in philosophy still exist, they now are on a more professional level and a greater spirit of objectivity prevails. It is apparent that the effects of deafness in our time and the problems in the educational, vocational, and social areas which must be overcome to assure the deaf person an appropriate place in our society transcend the controversies. Perhaps in the search for solutions to the larger problems, the controversies will also be resolved or at least clarified.

Appendix C

OBSERVATIONS OF PROGRAMS FOR THE EDUCATION OF HEARING IMPAIRED CHILDREN IN FIVE COUNTRIES IN EUROPE[1]

Introduction

Many educators of the deaf and other related professional personnel who are actively engaged in educational programs for hearing impaired children and young adults here in the United States have been guilty of making an unequivocal assumption that our programs represent the best available in the world. However, this self-appointed position of superiority can become shaken somewhat when one scrutinizes some of the work being done in this field in other places.

Though the present situation regarding the education of deaf children in our country is not an ideal one, the essential elements for fully coordinated programs of superior quality for hearing impaired children are available to us and the goals of better total education and service are well within our reach. These include techniques for evaluation and diagnosis, excellence of testing and auditory training equipment, the know-how and availability of visual aids equipment and programming devices as aids tc learning, the preparation of teachers, and school facilities. Unfortunately, these are not linked in such a manner that all our children in all parts of the country are equally well served and the benefits of the best programs universally applied. Local conditions, socio-economic factors, a differential of urban versus rural needs, and an unevenness in the general availability of good or even adequate clinical and school facilities contribute to these inequities of service.

Most educators have been patiently waiting for the time when all that is unknown about the learning problems of the deaf will suddenly be revealed to us. There are a few who are attempting to do something about it and are managing to cast a little light into some of the dark corners. What is being offered here is the possibility that part of what we seek can be found by taking a closer look at some of the practices and experiences of our colleagues overseas.

Visits to a sampling of schools, classes, and other facilities for the hearing impaired in five countries in Europe were made during September and October of 1964 at the request of the Secretary of Health,

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[1] Prepared for the Advisory Committee on the Education of the Deaf by Ralph L. Hoag, of the Division of Handicapped Children and Youth, U. S. Office of Education.

Education, and Welfare's Advisory Committee on Education of the Deaf to gather information regarding practices and the extent of services in these countries.

Schools, classes, and other facilities for hearing impaired children were visited in England, Denmark, Germany, France, and The Netherlands. Observations reported were based on visits to the following facilities:

England

Department of Education and Science, Ministry of Education
Royal National Institute for the Deaf, London
Longwill School, Birmingham
University of Manchester, Manchester
The Royal Schools for the Deaf, Manchester
Liverpool School for the Partially Deaf, Southport
Social Centre for the Deaf, Stoke-on-Trent
The Mount School for the Deaf, Stoke-on-Trent
Yorkshire Residential School for the Deaf, Doncaster

Denmark

State School for the Deaf, Copenhagen
State School for the Severely Hard of Hearing, Copenhagen

Germany

University of Heidelberg
School for the Deaf, Heidelberg
Pre School Clinic for Deaf Children, Heidelberg
School for the Deaf, Straubing

France

University of Paris
National Institute for the Deaf, Paris
Children's Clinic for Handicapped Children, Paris

The Netherlands

Institute for the Deaf, St. Michelsgestel
Hermus School for the Hard of Hearing, Amsterdam
Amman School for the Deaf and Hard of Hearing, Rotterdam

Persons interviewed included administrators responsible for programs and policies at the national levels, university personnel involved in the preparation of teachers and clinical personnel, administrators of schools and classes, experienced and qualified teachers, students in training, deaf children and young adults, and persons responsible for special services for the adult deaf. An attempt has been made to highlight certain outstanding aspects of the work done in these countries which appeared to have implications for us toward greater utilization of our resources in this field.

Definition of Terms Used

References to the descriptive terms dealing with hearing loss which appear in publications and articles in our country and elsewhere are extremely varied. As one would expect, the specific meanings of words used are directly related to the author's background of experience. Each of the disciplines of medicine, audiology, psychology, sociology, education, and others has its own definition for these terms. For use in this report, the following definitions are proposed:

The Deaf--are those children whose principal source for learning language and communication skills is mainly visual and whose loss of hearing, with or without amplification, is so great that it is of little or no practical value in learning to understand verbal communication auditorially and whose loss of hearing was acquired prelingually.

The Partially Hearing--are those children whose loss of hearing is so severe as to require a special educational curriculum and program of training that involves full-time auditory training along with vision for developing language and communication skills. Children, who because of the severity of their loss of hearing, need the full-time services of a special teacher for their education. These are the children who, as a result of early identification of hearing loss and early auditory training, are able to progress academically at a somewhat more rapid rate than those classified as deaf by virtue of more efficient use of their residual hearing.

The Hard of Hearing--are those children with moderate hearing losses, who are still able to understand readily fluent speech through hearing whether or not amplification is used. Educationally speaking, these are the children who, with some assistance, are able to attend classes with normally hearing children.

It must be borne in mind that these classifications are by no means static for any given individual. The use of the above terms as defined will serve to facilitate identification of the kinds of services for the hearing impaired that are a part of the programs in most countries in Europe.

Programs of Evaluation, Diagnosis, and Early Training

It was reported by educators in many places in the European countries visited that programs for the hearing impaired were providing complete services for virtually all children with hearing problems in their respective countries or geographic areas of responsibility. Services referred to include clinical evaluation and diagnosis, parent counseling, home teaching, nursery, and regular school programs. These services appeared to be quite well linked administratively with appropriate educational programs for continuous service and follow-up. The statement was made many times that nearly every child with a loss of hearing or an auditorially based language disorder is identified these days at an early age and appropriate services initiated.

Home teachers, peripatetic teachers, or home counselors serving as the liaison between clinical and actual school services make direct home contacts with parents of babies as young as nine months when hearing problems are suspected. All newborn high risk babies are closely observed for follow-up and further evaluative services. Parents whose children have hearing disorders are counseled regularly and are able to secure education and training assistance for their child.

Most schools for the deaf and/or the partially hearing maintain nursery departments and frequently accept children at three or even at two years of age. Many of these nursery school programs are a department attached to both day or residential school facilities for these children.

It would appear that national medical programs of these countries play a significant role in the early identification of hearing problems and help to insure universal service for all children who need such assistance.

There is evidence that early identification, diagnosis, evaluation, and training are important factors contributing to greater utilization of residual hearing and improved language and communication skills. For example, school enrollment figures in England from 1953 to 1963 demonstrate that the over-all incidence of hearing impairment enrollments in schools and classes for the deaf and partially hearing had not changed during this period. Within this population, the number of children enrolled in classes for the deaf decreased by about five per cent during the period while the number of enrollments in schools and classes for the partially hearing increased proportionately. Similarly, a portion of those who had been previously classified as partially hearing, because of increased skill in language and communication, left the special schools for these children to join the ranks of children with only moderate hearing losses in regular classes for the hearing. These shifts in school populations have closely paralleled the development of improved services at all levels. The fact that enrollments in special schools and classes did not increase during the 10-year period when the over-all national population had increased would imply that what is being done today in England is having a direct effect on the elevation of educational achievement levels for a significant portion of those children who have useable hearing.

At the same time there are signs of concern among special educators in England concerning the extent of real progress in the education of *deaf* children, especially those considered to be the nonoral deaf. A committee was recently appointed by the Secretary of State for the Department of Education and Science to examine the case for and against the use of manual methods of instruction for this group. This committee has been charged with the responsibility for reevaluating the problem of whether or not finger spelling or signing should be used as a method of instructions in the education of deaf children in England.

Elementary and Junior School Programs

The education of school-age children at elementary and junior school levels in England and Europe is quite uniformly directed toward children from age 5 or 6 to age 12. These can be roughly divided into primary level consisting of children from age 5 or 6 through approximately 8 years of age and the junior level including those from 8 to about 12 years of age. Educational programs for children beyond age 12 are reviewed in a separate section of this report. It should be mentioned at this juncture, however, that the total educational program for educable hearing impaired children, by law, in most countries is mandatory from about 6 to 16. Most of the countries visited have legal regulations requiring children to attend school at least nine years.

One of the major differences between schools in Europe and our own is the real division of deaf and partially hearing children in their schools and classes. Children who are deaf, as previously defined, are assigned to special facilities for the deaf. Those classified as partially hearing are assigned to special schools or classes for this group. Most programs visited maintain low teacher-pupil ratios, the average being about one teacher for eight children. Teachers in classes of nursery-age children and primary levels frequently have additional help from teacher assistants and other specialists to assist in work with the children. There appears to be adequate supervision of instruction by trained people at all levels.

Most classrooms are equipped with excellent quality group hearing aids. Funds for capital improvements involving buildings and major items of equipment are furnished on a matching formula basis between local or regional authorities and their respective national governments.

Schools for deaf children in England and Europe are also very well equipped with auditory training equipment. Utilization of this equipment for teaching is greater in the lower elementary levels than in classes beyond this level. Since the oral philosophy of education is predominant, every attempt is made to provide an oral environment for the child at all times. There are a few programs in England and Europe that incorporate manual, combined, or simultaneous methods for teaching children identified as nonoral. These are being observed by other educators who are searching for ways to implement and accelerate the academic progress of nonoral children. In general, the oral philosophy of education predominates and there still exists considerable opposition to the use of other teaching methods for any hearing impaired child. This is especially true in France and Germany.

When deaf children were observed during free play activities, in dining rooms, or in recreation rooms, communication among them was principally manual. Most school administrators and teachers accept this as a normal or natural practice and therefore do not actively suppress it. When asked if they know the children's language of signs, most confessed that they did not. Very few children's counselors or house parents in residential schools understand the language used by the children.

General use of manual communication between children in schools for the partially hearing was also observed. In these cases, however, the means of communication was of a somewhat higher order. The children mouthed words without voice and used manual gestures for on-going clarification of the language used. This is similar in some respects to the communication of students at Gallaudet College or students in advanced academic levels in our schools.

Senior Level Academic and Vocational Programs

Programs at senior levels in most European schools for the deaf and partially hearing include boys and girls within the age range of 12 to 16 years. Educational activities at this level are mainly academic with emphasis on further language development and work in subject matter areas. Auditory training continues to be an integral part of the program in all schools, especially in classes for the partially hearing. Compulsory education requirements in most countries make it mandatory for these children to attend schools an additional year, or even two in some cases, beyond what is required of children in ordinary schools for the hearing. Very few schools have programs and equipment for advanced vocational training in specific shopwork areas. The absence of such programs may be partially attributed to the relatively early age of departure from school. Most school programs include arts and crafts activities for the students. Residential schools seemed to have the best equipment for this. Homemaking arts for girls is a part of the regular curriculum in most schools.

In schools where more comprehensive vocational programs are offered, the students enrolled are encouraged to remain in school several years beyond the customary age of departure from school. Curriculum offerings in these instances, however, are generally limited to the traditional vocational training activities of woodwork, cabinet making, machine shop, tailoring, manufacturing, and shoe repair and others. There were no advanced vocational or technical schools established as separate facilities specifically for the deaf in the countries visited. France is currently planning to build one school of this type to be located in the southeastern part of the country.

Vocational training for the majority of school graduates is of the apprenticeship or on-the-job training type. Present-day labor shortages and a status of full employment which exist in most countries minimize placement problems so that most children are able to secure employment easily. Many educators express the feeling that the apprenticeship-type program tends to quite limiting and that many deaf and partially hearing individuals are employed in activities that require little skill with less responsibility than the potential performance ability of the person so employed.

To counter this, educators in some places, are exploring possibilities of a program they label as continuing education. These plans and ideas are taking shape in several ways. These include establishment of schools for young adults with a vocational-technical curriculum designed to open a wider range of occupational opportunities for capable students, enrollment of deaf or partially hearing students in vocational-technical programs for the hearing, and provision of tutorial services and job-oriented educational programs for short periods of two to six weeks per year for students who are training on the job in work study programs. The relative merits of each of these developing programs where they exist have yet to be assessed before these kinds of programs are incorporated into a greater number of schools.

Preparation of Teachers

Perhaps the most universal feature of all educational programs for the deaf and the partially hearing in Europe is the level and the status of teacher training. Certification and licensing requirements in order to teach the deaf or partially hearing are quite stringent. More men are among the teaching ranks in Europe than in our country. Recruitment problems appear to be nonexistent because training in special education areas is presently subsidized and has been in many instances since 1945. The majority of student teachers in training are receiving full-time salary at the level of regular teachers from sponsoring local education authorities. National student fellowships are available also for students interested in work in this area. Students in training must have completed the requirements for certification as teachers of normally hearing children. Special training in the area of the deaf and partially hearing ranges from two years in full-time programs to about four years in part-time in-service programs. Training is administered by college or university programs. All students are required to take some form of national written and practical examination after a given period of time before becoming fully licensed. The longest allowable period of time for completion of studies and training and taking the final examinations for a permanent license is four years. Most countries in Europe provide proportionately higher salary schedules for licensed teachers of the deaf and partially hearing children. Because of this, recruitment problems seem to be nonexistent. Teacher preparation centers indicate that more students apply for training than they are able to accommodate and therefore they are able to be highly selective. Educational background, personal references, and previous employment record are all carefully reviewed with personal interviews standing out as the most important aspect of the selection process.

In general, the teachers, whose work was observed, were highly competent instructors of children. They appeared to have had excellent training in all aspects of teaching hearing impaired children and especially in the use of auditory training equipment. Each knew his or her class well and was able to produce upon request a great deal of information and professional insight regarding the particular learning problems of each child.

The Adult Deaf

The national government of each country visited appeared to be considerably more paternalistic in the management of the affairs and problems of the adult deaf than is the case in our country. Until more recent years, responsibility for work with the adult deaf in England was assumed by religious missionaries. Those who still serve as missionaries to the deaf provide church services and conduct social affairs for them. The trend today seems to be toward publicly-supported services utilizing social workers who have had special training in counseling, job placement, and manual communication.

The membership in social organizations for the deaf in England are open to hearing impaired individuals on a volunteer basis and are located in public or private facilities in most large cities. Many are administered by civil servants who have assumed responsibilities for job placement and general counseling services in addition to organizing recreational and social activities for them.

Educators in most European countries implied that the care of the deaf from birth to death is an assumed responsibility of their respective national governments where necessary. Implementation of this policy was evident in a number of places visited. These take the form of placement in publicly-financed sheltered workshops for the handicapped, homes for the chronically ill, homes for the aged, and others.

Personal Impressions

Though European practices of early identification, evaluation, and diagnosis of hearing disorders are quite well organized, there is no doubt that comparable services of equal quality exist to a certain extent here in the United States. However, in this country these services tend to be available for the most part to individuals living in or near larger urban areas. Major gaps still remain in the extent of adequate services for all persons living in rural areas and smaller communities. Universal state plans of coordinated services for the hearing impaired are found in only a limited number of the 50 states and in many of these there is no public financial support for programs designed to serve children prior to legal school age.

The general practice in European schools of providing separate special educational facilities for the deaf and the partially hearing appears to be a rather successful one. The most obvious advantage of this system is the apparent accelerated rate of learning by those who are in schools for the partially hearing. Because of this separation, these children tend to be more oral. They appear to be more spontaneously vocal and seem to depend on and use the residual hearing they have more effectively than children observed in this country with equivalent losses who have not been given similar educational opportunities.

In looking at special services and social activities for and of the adult deaf in Europe and in the United States, one is bound to become much impressed with the fact that the deaf in our country have done a great deal more for themselves than the deaf in Europe have been able to do. The adult deaf in the United States have managed to secure a standard of living that is unequaled by the deaf anywhere else in the world. In addition, the deaf as a group have been able to successfully develop a series of church, athletic, social, and fraternal organizations at local, state, and national levels which are designed to meet their special needs. These accomplishments have been the result of their efforts and without public or other technical or financial assistance.

Services for the aged or chronically ill in the United States are available to the deaf as well. In a greater number of instances, however, they are privately-supported facilities at the community level whose services are generally for any handicapped individual of the community who is in need of such help. Vocational rehabilitation and job placement services for the handicapped in the United States are publicly-supported and are available to the deaf who wish to avail themselves of these services.

The deaf in our country, more than anywhere else, have attempted to provide many kinds of services through their own private organizations. These include general health and life insurance, homes for the aged deaf, social clubs, church activities, and others.

What faces the deaf today, however, is the possibility of a gradual decline of these opportunities. Modern advances in general education and the demands for better education as a result of modern technology are already having an effect on the employment picture for the deaf. This development in turn will have its effect on the independent status of the social structure as it now exists unless steps are taken by educators to move ahead with the time.

Summary

The primary purpose for visiting facilities and programs for the hearing impaired in England and Western Europe was to gather impressions and information regarding services that might help us improve services in our country. The task as viewed in retrospect was an enormous one, the results of which have been difficult to compile and report. Educators and other specialists in many parts of England and Europe are now demonstrating in their respective programs a number of highly successful practices in their work with hearing handicapped children. These are identified as follows:

1. Universally applied procedures for early identification and evaluation of hearing impairment encompass all geographic areas both urban and rural.

2. Diagnostic services, parent counseling, home teaching, and nursery school programs are available for all hearing impaired children beginning at very early ages.

3. There is universal recognition that the partially hearing need continuous auditory training beginning at a very early age in order to make full use of residual hearing for the development of better communication skills, and this has resulted in making special high quality equipment available to all schools for hearing impaired children.

4. Recognition of the need for a two track educational program designed to meet the different needs of the deaf and the partially hearing has resulted in the provision of separate educational facilities for each group.

5. Subsidization of teachers in training, maintenance of high standards for licensing or certification, and proportionately higher salary schedules as compensation for special training appear to have solved recruitment and staff replacement problems.

A substantial improvement in educational services for all hearing impaired children in the United States could be achieved if high quality service and general know-how that we now have in a few places were extended to meet the needs in all parts of our country. To achieve this goal we should very carefully consider how, within the framework of our structure of state governments, we can implement the following:

1. The establishment of a registry of high-risk, newborn children where the potential of hearing communication or learning disorders exists.
2. The installation of facilities adequately equipped and staffed to identify, evaluate, diagnose, and manage the early education of children with hearing disorders.
3. The establishment of procedures for regular periodic validation of earlier evaluations and recommended courses of action for the educational management of these children.

Since the educational problems of hearing impaired children cross all national boundaries, more opportunities for sharing of professional knowledge in this area of special education should be encouraged. Participation in professional conferences, site visits, observation of teaching, and teacher exchange programs would help to implement, facilitate, and accelerate progress in our field.

Appendix D

SUMMARY OF SELECTED DATA SUBMITTED BY SCHOOLS AND CLASSES FOR THE DEAF

A total of 269 schools and classes for the deaf furnished information to the Committee in the course of its inquiry. These schools serve 23,300 deaf children and constitute a sample of 58 per cent of all schools and classes for the deaf, and 76 per cent of all deaf children enrolled in them.

Residential Schools

Residential schools account for more than half of the deaf students reported receiving instruction in the schools and classes for the deaf according to the annual summaries in the *American Annals of the Deaf*. The *Annals* reports in its January, 1964, issue, 69 public residential schools (excluding Gallaudet College) serving 16,305 students and 17 denominational and private residential schools serving 1,373 students.[1] The Committee's questionnaire brought forth responses from 59 public residential schools--those serving 90 per cent of the pupils enrolled in such schools--and from 9 of the private residential schools--those serving 57 per cent of the pupils enrolled in such schools.

Size

The responding public residential schools range in size from 35 to 558, with the average 247. The private schools are generally smaller, ranging from 30 to 173, and averaging 87.

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[1] Actually, several privately-owned and operated schools are included in the classification of "public residential schools" used by the *Annals*. The distinction rests on whether or not public funds are used to support the school by tuition payments or otherwise. In order to avoid confusion, the *Annals* usage has been retained in this discussion, but it should be remembered that about one-fifth of the "public residential schools" operate under private control.

Age of Admission

Only one of the public schools reported no minimum age requirements, the others being almost equally divided among these categories: three-four, four-five, five-six, and over six. The median for the group fell at the top of the four-five range. The median for the private schools was in the three-four range, where also about half of the reporting schools fell.

Other Eligibility Requirements[2]

Hearing loss, educability, and ability to care for one's own physical needs were most frequently mentioned by both types of schools. About one-third of the public schools reported requirements of emotional stability and state residence. Only one of the private schools mentioned emotional stability and none reported residence as a requirement.

Numbers Denied Admission

Some deaf children are unable to meet certain of the requirements of eligibility for residential schools, and the schools were asked to report the totals over a three-year period, 1961-63. Fifty-one of the 59 public schools reported an average for the 3 years of 384, while 5 of the 9 private schools showed an average of 13. These represented 3.1 per cent and 1.7 per cent of enrollment respectively.

Waiting Lists

Residential schools, of course, have less flexibility in their capacity than day schools and classes, since dormitory arrangements represent an additional limiting factor. It must not be assumed that all those on waiting lists are being neglected, since some undoubtedly are availing themselves of other specialized programs; however, it is probable, given the unevenness of such alternative programs, that a significant number on the lists are not receiving the help they need.

Nineteen of the 59 responding public residential schools reported that they have waiting lists. Such lists totalled 530, or 3.6 per cent of enrollment. Six of the 9 private schools reported 235 on waiting lists, or 48.5 per cent of their enrollments.

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[2] These were volunteered requirements of eligibility, and undoubtedly represent those most prominent in the minds of the respondents. Almost certainly, more public schools had residence requirements than reported them.

Out-of-State Students

One unusual feature of the public provision of education for the deaf is the degree to which residents of one state are supported by that state in schools in another state. Twenty-four of the 59 public residential schools reported having a total of 349 students from other states--2.4 per cent of the total enrollment. Less unusual, of course, is the report from 6 of the 9 private schools of 369, or nearly half (46.9 per cent), of the students from other states.

Grades Offered and Diploma Requirements

From one point of view, the number of grades offered in schools for the deaf is less significant than in schools for the hearing, given the educational deprivation which deaf children suffer as a result of their early language-learning difficulties. On the other hand, if they are to fit into other educational programs, as seems increasingly likely, it does become a point of some significance. Furthermore, the possession of at least a high school diploma is not without importance for employment purposes for the deaf as well as for the hearing.

The public residential schools for the most part attempt to offer elementary and as much secondary education as the student can complete before the compulsory school-leaving age--usually 21. Half (30 of 59) reported offerings of 12 grades and presentation of academic diplomas to those students completing them. Three others reported 11 grades, and 10 others 10 grades. School principals in these latter cases generally find it impracticable to maintain the specialized subject-matter teachers for the very few students who really attain that level of work.

Many of the public schools offering nine or fewer grades are oral. The objective of most oral schools--public and private--is to prepare their students to take their places in integrated classes with the hearing, usually at the high school level. In some cases, however, the reason for fewer grade offerings is that there are not enough secondary school students to maintain teachers to offer the more diversified curriculum required for upper grades, and arrangements are made to send students to residential schools in other states where there are such secondary offerings. In all, 22 public residential schools report an offering of 8 or 9 grades. One each of the responding public residential schools offers four, six, and seven grades.

The private residential schools, because of their usually smaller enrollments and also the fact that all are oral schools, tend to offer fewer grades, seeking to place deaf children as early as possible into integrated classes. Of the 9 respondents, only 1 reports an offering of 12 grades. One each offers preschool only, four, five, six, and seven grades, and three offer eight grades.

The varied grade structures and the widely divergent standards and practices with respect to formal course completion make comparisons impossible and tabulations meaningless. The reporting public residential schools listed the following as being variously given at the completion of the school experience: academic diploma with honor, academic diploma, diploma, college preparatory diploma, full diploma, vocational diploma, general diploma, regular diploma, academic certificate, vocational certificate, certificate of high school credit, certificate of attendance, general certificate, enrollment certificate, certificate of completion, and certificate.

Some secondary diplomas are given "at the completion of the 10th grade," others are based on achievement test scores, others on "satisfactory work," others on the standard requirements for a high school diploma in the state, etc. A few are quite specific in terms of honor point average requirements, completion of a specified number of academic and vocational units and of majors and minors, while most of them state requirements in less objective terms, such as "course completion," "completion of high school course with good average grades," and "academic level commensurate with chronological age and norms for class."

Nineteen of the public residential schools stated requirements for academic diplomas in specific achievement levels as represented by the Stanford Achievement Test grade average scores. The stated requirements are as follows:

1 school	10.5 grade average
2 schools	9.0 grade average
2 schools	8.5 grade average
2 schools	8.1 grade average
7 schools	8.0 grade average
5 schools	7.0 grade average

Six of the above schools awarded no academic diplomas in 1964: 1 with a 10.5 requirement and 5 with an 8.0 requirement. Of the rest, the achievement test scores of the students awarded academic diplomas in 1964 were reviewed to see whether in fact the stated standards were adhered to. They were followed in these eight schools: one with an 8.5 standard, one with an 8.1 standard, one with an 8.0 standard, and all five[3/] with a 7.0 standard.

[3/] This group includes one oral school which offers only nine grades and awards an elementary school diploma. The other 18 award secondary diplomas, although only 12 offer 12 grades. One offers 11, three offer 10, and two offer 9.

Degree of Hearing Loss

The academic definition of deafness contains some judgmental factors; reporting schools were asked to report simply how many students were "deaf" and how many "hard of hearing." It was felt that this would be more meaningful and more successful than an attempt to get reports in terms of decibel loss. The public residential schools reported 85 per cent of their students deaf, and 11 per cent hard of hearing, while the private schools reported 83 per cent deaf and 7 per cent hard of hearing. (The totals are less than 100 per cent, since some schools reported the multiply handicapped separately.)

To the extent that auditory training is reflected by the number of children who wear individual hearing aids to utilize whatever residual hearing they have, greater acceptance by private schools is indicated. The private schools reported nearly 70 per cent wearing aids, while the public schools reported only 45 per cent.

Multiply Handicapped Deaf Children

One of the recent trends on which virtually all educators of the deaf comment is the increase in recent years in the number of deaf children who have one or more additional handicaps. They appear to be fairly evenly distributed, with the public schools reporting 16 per cent of their students multiply handicapped and the private schools reporting 20 per cent.

Communication Methods Used

All of the residential schools, both public and private, reported the use of oral methods in teaching young deaf children. All of the private schools except 1, and 13 of the public schools reported the use of only oral methods in the classroom. One private school reported the use of all methods. (It is interesting to note that 8 of the 13 "oral" public schools are among those classified as "public," although they are privately controlled and operated. See footnote, page D-1.)

Finger spelling is employed in addition to oral methods in the other 46 public residential schools, and the language of signs is also used in 33 of these. Most of those reporting the use of manual methods, however, indicated some restrictions on their use--either to the later years of school, or in some variation of a "manual track" to which were assigned those students not judged to be making or able to make satisfactory progress by oral methods.

Day Schools and Classes

Day schools and classes account for the enrollment of about 40 per cent of the deaf pupils in the country.[4] The public day class programs alone serve 28 per cent of the total, with 8 per cent enrolled in public day schools and 4 per cent in denominational and private day class programs.[5] Most of the latter offer preschool classes only and are relatively small. The distinction between public day schools and day classes, as used for classification purposes in the American Annals of the Deaf is that the public day schools are those housed in an entirely separate building, while public day classes are housed in a unit not devoted entirely to the education of the deaf.

The Committee's questionnaire brought responses from 11 of the 15 public day schools--those serving 90 per cent of the pupils enrolled in such schools, from 157 of the 297 public day class programs--those serving 60 per cent of the pupils enrolled in such classes, and from 33 of the 53 denominational and private day class programs--those serving 70 per cent of the pupils enrolled in such classes.

Size

Public day schools in the sample range in size from 66 to 441, the average being 185. Public day class programs range from 4 to 202, and average 32. Private day class programs range from 4 to 64, and average 25.

Age of Admission

The range of ages of eligibility for admission is from 2 years and 8 months to 6 years for public day schools, from 9 months to 14 years for public day class programs, and from no minimum to 5 years for private day class programs. (The upper limit of the range for public day class programs is applicable, of course, only to special high school programs for the deaf.) The median age of eligibility for both public day schools and classes falls between three and four years, while that for private classes is between two and three years.

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[4] American Annals of the Deaf, January, 1964.

[5] As used throughout this summary, the terms "public day class programs" and "private class programs" mean the array of classes in a single school which constitutes the reporting base. Many of these, however, are known to be single classes, some of which include children of widely different ages and abilities.

Other Eligibility Requirements

The most frequently mentioned eligibility requirement, aside from hearing loss, mentioned in the returns is educability, required in more than half of each category. Emotional stability and ability to care for one's physical requirements are mentioned in less than 20 per cent of the cases.

Numbers Denied Admission

Over the 3-year period 1961-63, those denied admission averaged 24 by public day schools (1.2 per cent of enrollment), 131 by public day class programs (2.6 per cent of enrollment), and 40 by private programs (6.6 per cent of enrollment).

Waiting Lists

Four of the public day schools reported waiting lists totalling 32 (1.5 per cent of enrollment); 27 of the public day class programs had waiting lists totalling 184 (3.6 per cent of enrollment); and 8 of the private programs had waiting lists totalling 60 (7.3 per cent of enrollment).

Out-of-State Students

Two public day schools and 10 public day class programs reported totals of 14 and 13 nonresident students respectively--in each case less than 1 per cent of enrollment. On the other hand, 11 private programs reported 51 nonresidents--over 6 per cent of enrollment.

Grades Offered and Diploma Requirements

The public day schools' median for grades offered is eight, with one offering three, one offering four, three offering six, one offering eight, and five offering nine. Public day class program offerings were grouped most heavily at "preschool only," 4 grades, 6 grades, 8 grades, 9 grades, and 12 grades. The median is found at six grades.

In the case of private classes, nearly all are preschool or first grade, 24 of 29 reporting grade information falling in this range.

Because of the orientation of nearly all of these schools and classes to the goal of transfer to integrated classes, the question on diploma requirements was naturally not applicable for the most part. In general, it may be assumed that regular requirements for the several school systems apply.

Degree of Hearing Loss

Public day schools reported 80 per cent of their students classified as deaf, and 15 per cent hard of hearing. Public day class programs showed 63 per cent deaf, 37 per cent hard of hearing, and private programs 63 per cent deaf and 30 per cent hard of hearing.

The use of individual hearing aids was highest in private classes, with 92 per cent of the students wearing them. For both public day schools and classes, the figure was 84 per cent.

Multiply Handicapped Deaf Children

The proportion of multiply handicapped deaf children was lowest in private classes (10 per cent) and highest in public day schools (22 per cent). Public day classes reported 15 per cent of their pupils in this category.

Communication Methods Used

All public day schools reported the use of only oral methods of communication in the classroom. One private class reported the use of finger spelling, all others only oral methods. Six of the public day class programs reported the use of all methods, and four more combined finger spelling with oral methods. Day schools and classes can thus be characterized as overwhelmingly oral in classroom communication.

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